PARTS LIST &
CIRCUIT DIAGRAMS

FISHER

# FVH-P200DK

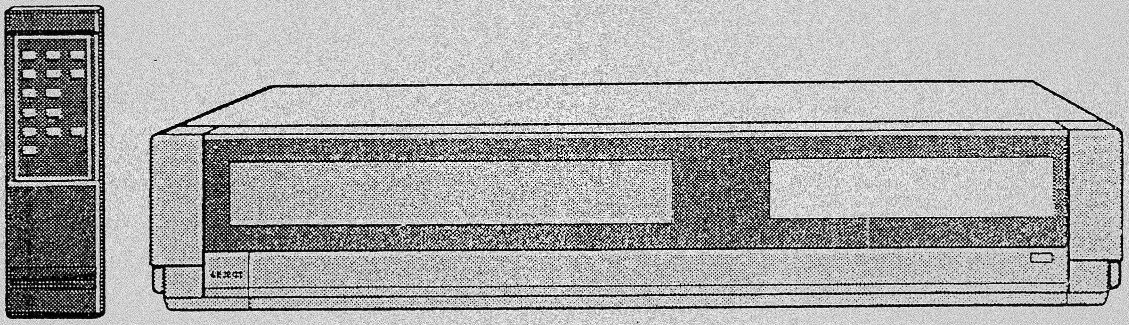
(East Europe)

VIDEO
CASSETTE RECORDER

VHS PAL HQ

Please see other materials with Reference No. given in table below.

| Materials | Model No. | Reference No. |
|---|---|---|
| SERVICE MANUAL | FVH-P210 Series | WM-530190 |
| MECHANISM MANUAL | P88 MECHANISM | WM-530061 |
| TRANING MANUAL | FVH-P210 Series | WM-530193 |



## CONTENTS

ACCESSORIES. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
PACKING MATERIALS. . . . . . . . . . . . . . . . . . . . . . . . 1
CABINET & CHASSIS PARTS . . . . . . . . . . . . . . . . . . 1
MECHANISM PARTS 1 . . . . . . . . . . . . . . . . . . . . . . . 2
MECHANISM PARTS 2 . . . . . . . . . . . . . . . . . . . . . . . 3
MECHANISM PARTS 3 . . . . . . . . . . . . . . . . . . . . . . . 4

ELECTRICAL PARTS
  COMPL, CP-A. . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
  COMPL, VD-1 . . . . . . . . . . . . . . . . . . . . . . . . . . . 8
  COMPL, VD-2 . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
  COMPL, VP-1. . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
  COMPL, AD-1 . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
  COMPL, PW-1. . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
  COMPL, PW-2. . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
  IF PACK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 11
  COMPL, TM-1 . . . . . . . . . . . . . . . . . . . . . . . . . . . 12
  COMPL, TM-2 . . . . . . . . . . . . . . . . . . . . . . . . . . . 13
  COMPL, TM-3 . . . . . . . . . . . . . . . . . . . . . . . . . . . 13
  COMPL, TB-1. . . . . . . . . . . . . . . . . . . . . . . . . . . . 13
REMOCON . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 14
CIRCUIT DIAGRAM

## PRODUCT SAFETY NOTICE

The components designated by a symbol (⚠) in this schematic diagram designates components whose value are of special significance to product safety. Should any component designated by a symbol need to be replaced, use only the part designated in the Parts List. Do not deviate from the resistance wattage and voltage rating shown.

**NOTE:** Parts order must contain Model Number, Part Number and Description.

DP1/EEF 143 117 05

REFERENCE No. WM-530226

## ACCESSORIES

| LOCATION | | PARTS NO. | DESCRIPTION |
|---|---|---|---|
| | | 613 090 3549 | INSTRUCTION MANUAL |
| | | 613 090 3501 | REMOCON |
| | | 613 011 7359 | CORD.ANT CABLE |
| | | 613 064 7269 | GUARANTEE CARD |

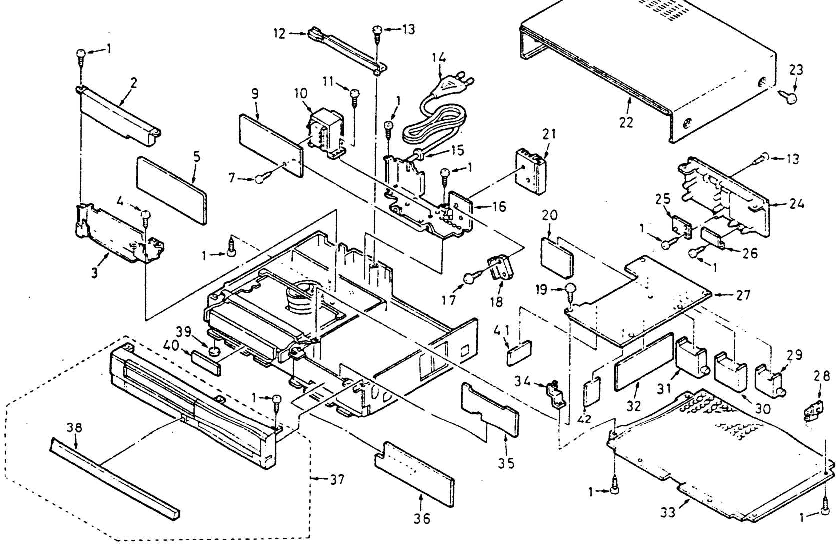
## CABINET & CHASSIS PARTS

| LOCATION | | PARTS NO. | DESCRIPTION |
|---|---|---|---|
| 1 | | 411 021 4005 | SCR S-TPG BIN 3X12 |
| 2 | | 613 077 1735 | COMPL.VP-1 |
| 3 | | 613 077 3128 | BRACKET.PREAMP |
| OR | | 613 081 3992 | BRACKET.PREAMP |
| 4 | | 411 046 9702 | SCR PAN+SW+W 3X6 |
| 5 | | 613 079 0859 | SHIELD |
| 7 | | 411 021 6405 | SCR S-TPG BIN 3X8 |
| 9 | | 613 087 3095 | COMPL.PW-1 |
| 10 | ⚠ | 613 090 4607 | TRANS.POWER |
| 11 | | 411 021 9604 | SCR S-TPG BIN 4X8 |
| 12 | | 613 077 3487 | BLIND |
| 13 | | 411 021 4104 | SCR S-TPG BIN 3X12 |
| 14 | ⚠ | 613 086 0507 | CORD.POWER |
| OR | ⚠ | 613 086 2150 | CORD.POWER |
| 15 | | 613 053 6686 | FIXER |
| OR | | 613 053 8017 | FIXER |
| OR | | 613 053 8055 | FIXER |
| 16 | | 613 077 3142 | BRACKET |
| 17 | | 411 021 4500 | SCR S-TPG BIN 3X16 |
| 18 | | 613 078 6579 | COMPL.PW-2 |
| 19 | | 411 021 4203 | SCR S-TPG BIN 3X12 |
| 20 | | 613 079 7445 | COMPL.AD-1 |

## PACKING MATERIALS

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| | 613 090 3525 | CORR CASE.INNER |
| | 613 022 4606 | CUSHION INNER.LEFT |
| | 613 022 4613 | CUSHION INNER.RIGHT |
| | 613 061 7279 | IND POLYE COVER |
| | 613 084 1544 | PAD |

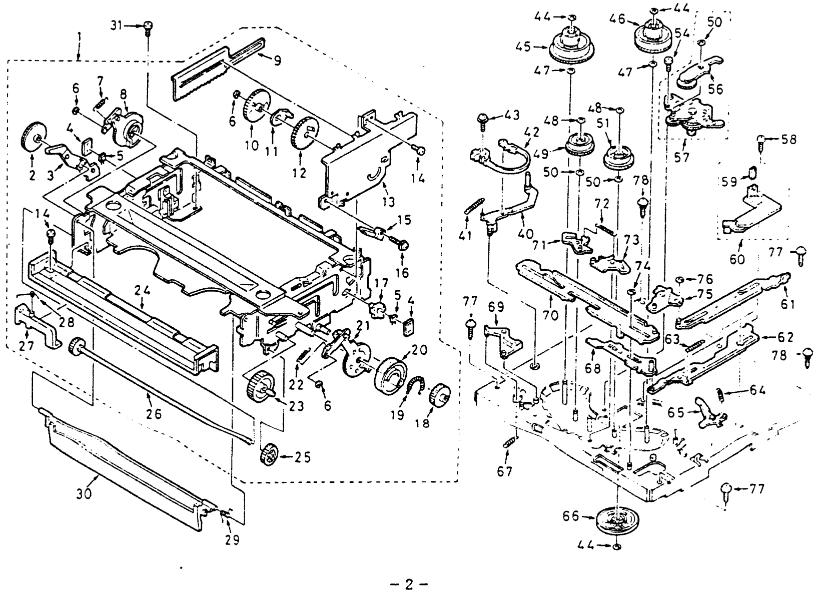
| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| 21 | 613 079 3973 | HEAT SINK |
| 22 | 613 022 0547 | COVER.TOP |
| 23 | 412 024 7604 | SPECIAL SCREW |
| 24 | 613 077 2619 | TERMINAL(INCLUDE CP-1) |
| 25 | 613 079 4796 | COMPL.TB-1 |
| 26 | 613 077 3159 | BRACKET(INCLUDE CP-1) |
| 27 | 613 077 1575 | COMPL.CP-1 |
| 28 | 613 048 6912 | BRACKET.CABINET |
| 29 | 613 080 5829 | MODULATOR.RF(INCLUDE CP-1) |
| 30 | 613 092 9396 | IF PACK |
| 31 | 613 079 2020 | TUNER |
| 32 | 613 084 5221 | COMPL.VD-1 |
| 33 | 613 022 0578 | COVER.BOTTOM |
| 34 | 613 022 0738 | BRACKET.CABINET |
| 35 | 613 093 5229 | COMPL.TM-3 |
| 36 | 613 090 4973 | COMPL.TM-1 |
| 37 | 613 090 3327 | ASSY.CABINET.FRONT |
| 38 | 613 090 3389 | DOOR |
| 39 | 613 047 1772 | STAND |
| 40 | 613 090 4980 | COMPL.TM-2 |
| 42 | 613 078 6197 | COMPL.VD-2 |



## MECHANISM PARTS 1

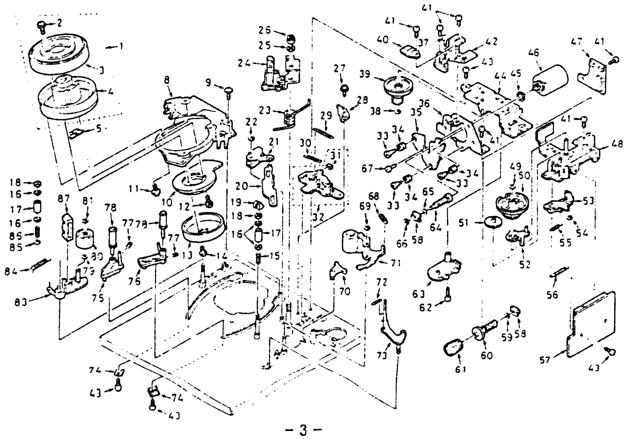
| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| 1 | 613 085 7149 | COMPL.CASSETTE MECHANISM |
| 2 | 613 022 2572 | GEAR.IDLER L |
| 3 | 613 022 2275 | LEVER.DOOR OPENER |
| 4 | 613 022 0585 | LID |
| 5 | 407 098 3201 | PHOTO COUPLE PN150SAN |
| 6 | 411 015 9801 | RING E 2.3 |
| 7 | 613 022 1643 | SPRING.LINK L |
| 8 | 613 022 0073 | ASSY.GEAR.LEVER L |
| 9 | 613 022 2695 | RACK |
| 10 | 613 022 2633 | GEAR.LOCK |
| 11 | 613 021 9916 | ASSY.LEVER.PINION |
| 12 | 613 022 2626 | GEAR.PINION |
| 13 | 613 021 9657 | ASSY.BRACKET.GEAR |
| 14 | 411 027 1305 | SCR S-TPG BIN 2.6X4 |
| 15 | 613 006 4479 | SPECIAL SWITCH |
| 16 | 411 106 9208 | SCR PAN+SW+W 2X9 |
| 17 | 613 022 0936 | HOLDER.TRANSISTOR |
| 18 | 613 022 2619 | GEAR.IDLER |
| 19 | 613 022 1667 | SPRING.GEAR MAIN |
| 20 | 613 022 2596 | GEAR.MAIN |
| 21 | 613 022 0097 | ASSY.GEAR.LEVER R |
| 22 | 613 022 1674 | SPRING.LINK R |
| 23 | 613 022 2602 | GEAR.IDLER R |
| 24 | 613 022 4064 | BOARD.UNDER |
| 25 | 613 022 2558 | GEAR.COUPLE R |
| 26 | 613 022 0226 | ASSY.ROD |
| 27 | 613 022 2237 | LEVER.SAFETY SW |
| 28 | 613 022 1827 | SPRING.SAFETY SW |
| 29 | 613 022 1803 | SPRING.DOOR |
| 30 | 613 081 7907 | CASSETTE DOOR |
| 31 | 411 001 8702 | SCR BIN 3X6 |
| 40 | 613 021 9831 | ASSY.LEVER.TENSION |
| 41 | 613 085 7996 | SPRING.LEVER TENSION |
| 42 | 613 021 9701 | ASSY.HOLDER.BAND |
| 43 | 411 036 2805 | SCR PAN+SW+W 2.6X6 |
| 44 | 411 109 1605 | WASHER Y 2.6X6X0.25 |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| 45 | 613 022 0127 | ASSY.REEL.SUPPLY |
| 46 | 613 022 0110 | ASSY.REEL.TAKE UP |
| 47 | 412 021 5306 | SPECIAL WASHER 3.1X6X0.3T |
| OR | 412 015 8900 | SPECIAL WASHER 3.1X6X0.4T |
| OR | 412 015 8504 | SPECIAL WASHER 3.1X6X0.5T |
| 48 | 411 109 1506 | WASHER Y 2.1X6X0.25 |
| OR | 411 109 1407 | WASHER Y 2.1X5X0.25 |
| 49 | 613 085 7231 | GEAR.REEL SUPPLY |
| 50 | 412 026 7305 | SPECIAL WASHER 2.6X6X0.25 |
| 51 | 613 022 2480 | GEAR.REEL TAKE UP |
| 54 | 411 031 0905 | SCR BIN 2.6X4 |
| 56 | 613 022 0134 | ASSY.IDLER |
| 57 | 613 085 7101 | COMPL.IDLER.CLUTCH |
| 58 | 411 021 3107 | SCR S-TPG BIN 2.6X8 |
| 59 | 407 016 7205 | LED LN59 |
| 60 | 613 078 6302 | COMPL.MC-4 |
| 61 | 613 021 9985 | ASSY.SLIDE.ACT PLATE |
| 62 | 613 021 9992 | ASSY.SLIDE.C BRAKE |
| 63 | 613 022 1612 | SPRING.RETURN SLIDE |
| 64 | 613 022 1506 | SPRING.SUB T |
| 65 | 613 022 0196 | ASSY.BRAKE.SUB T |
| 66 | 613 077 3647 | PULLEY.REEL |
| 67 | 613 022 1490 | SPRING.SUB SUPPLY |
| 68 | 613 022 2374 | SLIDE.ACT BRAKE |
| 69 | 613 084 8871 | BRAKE.SUB SUPPLY |
| 70 | 613 022 0004 | ASSY.SLIDE.M PLATE |
| 71 | 613 080 9216 | ASSY.BRAKE.SUPPLY |
| 72 | 613 022 1544 | SPRING.MAIN BRAKE |
| OR | 613 086 2914 | SPRING.MAIN BRAKE |
| 73 | 613 080 9209 | ASSY.BRAKE.TAKE UP |
| 74 | 411 109 3005 | WASHER Y 2.6X5X0.5 |
| 75 | 613 022 2015 | LEVER.CONT PLATE |
| 76 | 411 109 1407 | WASHER Y 2.1X5X0.25 |
| 77 | 411 021 7907 | SCR S-TPG BIN 4X12 |
| 78 | 412 030 2402 | SPECIAL SCREW |



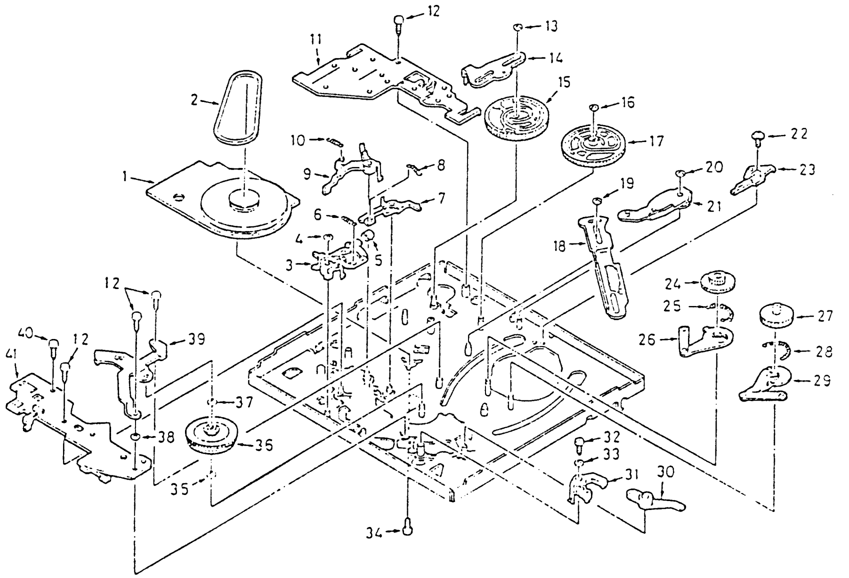
## MECHANISM PARTS 2

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| 1 | 613 022 0257 | COMPL.CYLINDER.2N2P |
| OR | 613 087 6768 | COMPL.CYLINDER.2N2P |
| 2 | 411 033 1608 | SCR PAN+W 3X8 |
| 3 | 613 022 0264 | ASSY.CYLINDER.UPR 2N2P |
| OR | 613 087 6775 | ASSY.CYLINDER.UPR 2N2P |
| 4 | 613 022 0271 | ASSY.CYLINDER.LWR2 |
| OR | 613 077 2138 | ASSY.CYLINDER.LWR 2 |
| 5 | 613 051 4036 | SPACER.MOTOR |
| 8 | 613 022 1001 | BASE.CYLINDER |
| OR | 613 083 9072 | BASE.CYLINDER |
| 9 | 411 047 7509 | SCR PAN+FLG 3X6 |
| 10 | 613 035 7279 | STATOR.MOTOR CYL |
| 11 | 411 047 5000 | SCR PAN+FLG 2.6X8 |
| OR | 412 030 9708 | SPECIAL SCREW 2.6X8 |
| 12 | 411 044 9209 | SCR PAN+SW 2.3X8 |
| 13 | 613 022 4019 | ROTOR.MOTOR CYL |
| 14 | 411 044 9001 | SCR PAN-SW 2.3X6 |
| 15 | 613 022 1766 | SPRING.ADJUST GUIDE |
| 16 | 613 053 3227 | SPECIAL WASHER |
| 17 | 613 053 3307 | TAPE GUIDE |
| 18 | 412 026 2607 | SPECIAL NUT |
| 19 | 613 055 2434 | CAP |
| 20 | 613 021 9961 | ASSY.SLIDE.ACT PINCH |
| 21 | 613 021 9800 | ASSY.LEVER.CAM PINCH |
| 22 | 411 109 2008 | WASHER Y 3.1X8X0.5 |
| 23 | 613 022 1797 | SPRING.ACE HEAD |
| 24 | 613 021 9640 | COMPL.BRACKET.HEAD |
| 25 | 613 051 4615 | SPACER |
| 26 | 412 015 8207 | SPECIAL NUT |
| 27 | 411 120 0007 | SCR PAN-SW+W 2.6X5 |
| 28 | 613 022 0752 | BRACKET.STOPPER |
| 29 | 613 022 1575 | SPRING.LINK LOCK |
| 30 | 613 022 1582 | SPRING.SLIDE BRAKE |
| 31 | 613 022 2725 | DAMPER |
| 32 | 613 022 0059 | ASSY.SLIDE.CAM |
| 33 | 412 021 1407 | SPECIAL SCREW |
| 34 | 613 079 1030 | DAMPER.MOTOR |
| 35 | 613 079 0989 | PLATE.MOTOR |
| 36 | 613 079 0736 | BRACKET.STAND |
| 37 | 411 021 3107 | SCR S-TPG BIN 2.6X8 |
| 38 | 411 109 1902 | WASHER Y 3.1X6X0.5 |
| 39 | 613 077 3579 | GEAR.HELICAL |
| 40 | 613 089 4328 | COMPL.SENSOR DEW |
| 41 | 411 040 2303 | SCR PAN 2.6X5 |
| 42 | 613 077 3180 | BRACKET.HOLDER |
| 43 | 411 031 1209 | SCR BIN 2.6X5 |
| 44 | 613 079 6868 | ASSY.BRACKET.MOTOR |
| 45 | 613 077 3616 | DAMPER.WORM |
| 46 | 613 021 9527 | ASSY.LOADING MOTOR |
| 47 | 613 078 6623 | COMPL.MC-3 |
| 48 | 613 078 7705 | ASSY.BRACKET.FRONT |
| 49 | 613 027 0504 | WASHER 4.1X6.5X0.5 |
| 50 | 613 077 3586 | GEAR.HELICAL FRONT |
| 51 | 613 022 2534 | GEAR.FRONT LOAD |
| 52 | 613 021 9824 | ASSY.LEVER.FRONT |
| 53 | 613 022 0011 | ASSY.SLIDE.FRONT |
| 54 | 411 109 3005 | WASHER Y 2.6X5X0.5 |
| 55 | 613 022 1636 | SPRING.LEVER ACT |
| 56 | 613 022 1629 | SPRING.LEVER LOAD |
| 57 | 613 078 6494 | COMPL.MC-2 |
| 57-1 | 403 001 3108 | CERAMIC 0.1U Z 16V.INCLUDE MC-2 |
| 57-2 | 613 009 8306 | SOCKET 26P.INCLUDE MC-2 |
| 58 | 613 077 3227 | HOLDER.WORM |
| 59 | 613 027 0627 | WASHER 2.1X6X0.5 |
| 60 | 613 078 8344 | ASSY.WORM.LOAD |
| 61 | 613 022 2985 | BELT.LOADING |
| 62 | 411 002 5700 | SCR PAN 2.6X12 |
| 63 | 613 077 4361 | ROTARY SWITCH |
| 64 | 613 078 8320 | ASSY.WORM.FRONT |
| 65 | 613 027 0375 | WASHER 2.1X4.0X0.13 |
| 66 | 613 053 2381 | SPECIAL WASHER |
| 67 | 411 040 0507 | SCR PAN 2.6X3 |
| 68 | 613 022 1483 | SPRING.PINCH ROLLER |
| 69 | 411 109 2107 | WASHER Y 3.6X6X0.5 |
| 70 | 613 078 8160 | COMPL.LEVER.ACT BRAKE |
| 71 | 613 022 0158 | COMPL.PINCH ROLLER |
| 72 | 613 022 1568 | SPRING.REVIEW LEVER |
| 73 | 613 021 9886 | ASSY.LEVER.REV GUIDE |
| 74 | 613 022 1919 | PLATE.GUIDE |
| 75 | 613 021 9725 | ASSY.BASE.ROLLER S |
| 76 | 613 021 9732 | ASSY.BASE.ROLLER T |
| 77 | 411 063 0904 | SCR SET HEX-SCT 2X3 |
| 78 | 613 022 0233 | ASSY.GUIDE.ROLLER |
| 79 | 412 026 7800 | SPECIAL WASHER 0.13T |
| 80 | 613 080 6703 | ROLLER.IMPEDANCE |
| OR | 613 022 2817 | ROLLER.IMPEDANCE |
| 81 | 411 109 2602 | WASHER Y 1.5X4X0.25 |
| 83 | 613 021 9893 | ASSY.LEVER.FE HEAD |
| 84 | 613 022 1698 | SPRING.ERASE HEAD |
| 85 | 411 109 1704 | WASHER Y 6.4X10X0.25 |
| 86 | 613 022 1773 | SPRING.GUIDE SUPPLY |
| 87 | 613 022 4224 | FTE HEAD |



## MECHANISM PARTS 3

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| 1 | 613 022 4484 | MOTOR.CAPSTAN |
| OR | 613 080 8912 | MOTOR.CAPSTAN |
| 2 | 613 022 2978 | BELT.REEL DRIVE |
| 3 | 613 021 9848 | ASSY.LEVER.CLUTCH |
| 4 | 411 125 4208 | RING CS 3.5 |
| 5 | 613 079 1023 | DAMPER.LEVER CLUTCH |
| 6 | 613 022 1520 | SPRING.LEVER CLUTCH |
| 7 | 613 082 3434 | LEVER.CHANGE CLUTCH |
| 8 | 613 022 1711 | SPRING.CHANGE CLUTCH |
| 9 | 613 081 7518 | ASSY.BRAKE.CAPSTAN |
| 10 | 613 022 1513 | SPRING.CAPSTAN |
| 11 | 613 022 0837 | BRACKET.REINFORCE |
| 12 | 411 021 3107 | SCR S-TPG BIN 2.6X8 |
| 13 | 411 109 2008 | WASHER Y 3.1X8X0.5 |
| 14 | 613 021 9978 | ASSY.SLIDE.CAM PLATE |
| 15 | 613 022 2701 | CAM.MODE |
| 16 | 411 109 1902 | WASHER Y 3.1X6X0.5 |
| 17 | 613 022 2718 | CAM.MAIN |
| 18 | 613 022 2664 | RACK.LOAD |
| 19 | 411 109 1803 | WASHER Y 2.6X6X0.5 |
| 20 | 411 109 2107 | WASHER Y 3.6X6X0.5 |
| OR | 411 109 2206 | WASHER Y 3.6X8X0.5 |
| 21 | 613 021 9794 | ASSY.LEVER.CAM LOAD |
| 22 | 411 047 6809 | SCR PAN+FLG 3X4 |
| 23 | 613 021 9763 | ASSY.EARTH.CYL |
| 24 | 613 022 2435 | GEAR.LOAD TAKE UP |
| OR | 613 090 6380 | GEAR.LOAD T |
| 25 | 613 022 1551 | SPRING.GEAR LOAD T |
| 26 | 613 021 9879 | ASSY.LEVER.LOAD T |
| 27 | 613 022 2428 | GEAR.LOAD SUPPLY |
| OR | 613 090 6373 | GEAR.LOAD S |
| 28 | 613 022 1704 | SPRING.GEAR LOAD S |
| 29 | 613 021 9862 | ASSY.LEVER.LOAD S |
| 30 | 613 022 2039 | LEVER.RETURN TENSION |
| 31 | 613 021 9817 | ASSY.LEVER.CONTROL |
| OR | 613 091 3104 | ASSY.LEVER.CONTROL |
| 32 | 411 022 8903 | SCR S-TPG PAN 2.3X12 |
| OR | 411 066 7702 | SCR TPG PAN 2.3X5 |
| 33 | 411 087 6005 | WASHER V 2.6X7.5X0.5 |
| OR | 411 087 4902 | WASHER V 2.3X6.5X0.5 |
| 34 | 411 040 2303 | SCR PAN 2.6X5 |
| 35 | 412 015 8603 | SPECIAL WASHER |
| 36 | 613 082 8712 | ASSY.GEAR.FRICTION |
| 37 | 411 109 1605 | WASHER Y 2.6X6X0.25 |
| 38 | 411 102 9905 | WASHER Y 3.2X8X1 |
| 39 | 613 079 8121 | BRACKET.PULLEY |
| 40 | 411 100 0300 | SCR S-TPG BIN 2.6X5 |
| 41 | 613 077 9489 | COMPL.MC-1 |
| 41-1 | 401 024 6700 | CARBON 100 JA 1/6W R 2.INCLUDE MC-1 |
| OR | 401 012 4404 | CARBON 100 JA 1/4W R 2.INCLUDE MC-1 |
| 41-2 | 401 026 0607 | CARBON 270 JA 1/6W R 1.3.INCLUDE MC-1 |
| OR | 401 017 0703 | CARBON 270 JA 1/4W R 1.3.INCLUDE MC-1 |
| 41-3 | 613 022 4538 | SPECIAL.SWITCH.FRONT END.INCLUDE MC-1 |
| 41-4 | 613 022 4545 | SPECIAL SWITCH.E-P.INCLUDE MC-1 |
| 41-5 | 407 094 1300 | PHOTO COUPLE SPI-315-04-C.INCLUDE MC-1 |
| OR | 407 043 0101 | PHOTO DIODE ON2170-R.INCLUDE MC-1 |
| 41-6 | 613 022 1155 | SPACER.PHOTO SENSOR.INCLUDE MC-1 |



# ELECTRICAL PARTS

NOTE;

*Materials of Capacitors and Resistors are abbreviated as follows;

Resistors

| | |
|---|---|
| MT-FILE | Metal Film Resistor |
| MT-GLAZE | Metal Glaze Resistor |
| OXIDE-MT | Oxide Netal Film Resistor |

Capacitors

| | |
|---|---|
| MT-POLYEST | Metallized Polyester Capacitor |
| MT-COMPO | Metallized Composite Capacitor |

| | |
|---|---|
| TA-SOLID | Tantalum Solid Capacitor |
| AL-SOLID | Aluminum Solid Capacitor |
| NP-ELECT | Non-Polarized Electrolytic Capacitor |
| OS-SOLID | Aluminum Solid Capacitors with Organic Semiconductive Electrolytic Capacitor |
| DL-ELECT | Double Layered Electrolytic Capacitor |

*Tolerance of Capacitor(10pF over) and Resistor are noted with follow symboles.

F ············ ±1%　G ············ ±2%　J ············ ±5%　K ············ ±10%
M ············ ±20%　N ············ ±30%　Z ············ +80% ~ −20%

| LOCATION | PARTS NO. | DESCRIPTION | | | |
|---|---|---|---|---|---|
| CŌMPL,CP-A | | | | | |
| COMPL.NO. | 613 079 3386 | | | | |

VIDEŌ CIRCUIT

| LOCATION | PARTS NO. | DESCRIPTION | | | |
|---|---|---|---|---|---|
| B1602 | 405 018 2501 | TR 2SC3399-AC | | | |
| OR | 405 001 0403 | TR RN1204-TPE4 | | | |
| B1605 | 405 018 2501 | TR 2SC3399-AC | | | |
| OR | 405 000 6104 | TR DTC144ES-DCTP | | | |
| C1601 | 403 039 2609 | ELECT | 47U | M | 6.3V |
| C1602 | 403 039 2609 | ELECT | 47U | M | 6.3V |
| C1603 | 403 121 9509 | CERAMIC | 0.1U | Z | 50V |
| C1604 | 403 038 2006 | ELECT | 100U | M | 6.3V |
| C1605 | 403 001 1906 | CERAMIC | 0.01U | M | 16V |
| C1606 | 403 039 3507 | ELECT | 470U | M | 6.3V |
| C1607 | 403 042 3006 | ELECT | 100U | M | 16V |
| C1608 | 403 022 7703 | CERAMIC | 33P | J | 50V |
| C1609 | 403 024 1501 | CERAMIC | 39P | J | 50V |
| C1610 | 403 043 9601 | ELECT | 47U | M | 16V |
| C1611 | 403 001 1906 | CERAMIC | 0.01U | M | 16V |
| C1612 | 403 038 5403 | ELECT | 22U | M | 6.3V |
| C1616 | 403 001 1906 | CERAMIC | 0.01U | M | 16V |
| D1601 | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| OR | 407 007 9904 | DIODE GMA01-BT | | | |
| D1602 | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| OR | 407 007 9904 | DIODE GMA01-BT | | | |
| D1605 | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| OR | 407 007 9904 | DIODE GMA01-BT | | | |
| D1606 | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| OR | 407 007 9904 | DIODE GMA01-BT | | | |
| IC161 | 409 003 4501 | IC BA7021 | | | |
| L1601 | 613 015 6730 | HF CHOKE 100UH K | | | |
| L1602 | 613 014 0975 | HF CHOKE 100UH K | | | |
| L1603 | 613 015 6730 | HF CHOKE 100UH K | | | |
| Q1602 | 405 004 4007 | TR 2SA608-E-SPA-AC | | | |
| OR | 405 004 4601 | TR 2SA608-F-SPA-AC | | | |
| OR | 405 006 1707 | TR 2SA933S-TP-Q | | | |
| OR | 405 006 1806 | TR 2SA933S-T93-R | | | |
| Q1603 | 405 004 4601 | TR 2SA608-F-SPA-AC | | | |
| OR | 405 006 1806 | TR 2SA933S-T93-R | | | |
| Q1604 | 405 019 2005 | TR 2SC536-E-SPA-AC | | | |
| OR | 405 019 2807 | TR 2SC536-F-SPA-AC | | | |
| OR | 405 011 8401 | TR 2SC1740S-DCTP-Q | | | |
| OR | 405 011 8500 | TR 2SC1740S-DCTP-R | | | |
| Q1605 | 405 004 4007 | TR 2SA608-E-SPA-AC | | | |
| Q1605 | 405 004 4601 | TR 2SA608-F-SPA-AC | | | |
| OR | 405 006 1707 | TR 2SA933S-TP-Q | | | |
| OR | 405 006 1806 | TR 2SA933S-T93-R | | | |
| R1601 | 401 020 1907 | CARBON | 4.7K | JA | 1/4W |
| R1602 | 401 022 6702 | CARBON | 75 | JA | 1/4W |
| R1603 | 401 012 6903 | CARBON | 10K | JA | 1/4W |
| R1604 | 401 012 6903 | CARBON | 10K | JA | 1/4W |
| R1606 | 401 020 2805 | CARBON | 47K | JA | 1/4W |
| R1607 | 401 020 2805 | CARBON | 47K | JA | 1/4W |
| R1614 | 401 013 5202 | CARBON | 1.2K | JA | 1/4W |
| R1615 | 401 021 1807 | CARBON | 560 | JA | 1/4W |
| R1616 | 401 012 4404 | CARBON | 100 | JA | 1/4W |
| R1617 | 401 021 1807 | CARBON | 560 | JA | 1/4W |
| R1618 | 401 022 6702 | CARBON | 75 | JA | 1/4W |
| R1619 | 401 013 9408 | CARBON | 1.3K | JA | 1/4W |
| R1620 | 401 021 2903 | CARBON | 5.6K | JA | 1/4W |
| R1621 | 401 015 2605 | CARBON | 1.8K | JA | 1/4W |
| R1622 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R1623 | 401 023 1607 | CARBON | 820 | JA | 1/4W |
| R1624 | 401 015 2605 | CARBON | 1.8K | JA | 1/4W |
| R1625 | 401 021 1807 | CARBON | 560 | JA | 1/4W |
| R1628 | 401 012 6903 | CARBON | 10K | JA | 1/4W |
| R1640 | 401 012 5609 | CARBON | 1K | JA | 1/4W |

AUDIŌ CIRCUIT

| LOCATION | PARTS NO. | DESCRIPTION | | | |
|---|---|---|---|---|---|
| R2101 | 401 018 8307 | CARBON | 36K | JA | 1/4W |
| R2103 | 401 020 2805 | CARBON | 47K | JA | 1/4W |
| R2104 | 401 019 7705 | CARBON | 4.3K | JA | 1/4W |
| R2105 | 401 023 1607 | CARBON | 820 | JA | 1/4W |
| R2106 | 401 013 9408 | CARBON | 1.3K | JA | 1/4W |
| R2109 | 401 023 1607 | CARBON | 820 | JA | 1/4W |
| R2110 | 401 015 2605 | CARBON | 1.8K | JA | 1/4W |

SYSTEM CŌNTRŌL CIRCUIT

| LOCATION | PARTS NO. | DESCRIPTION | | | |
|---|---|---|---|---|---|
| C3041 | 403 069 1207 | CERAMIC | 1000P | K | 50V |
| C3042 | 403 038 1603 | ELECT | 100U | M | 6.3V |
| C3043 | 403 001 3108 | CERAMIC | 0.1U | Z | 16V |
| C3044 | 403 001 3108 | CERAMIC | 0.1U | Z | 16V |
| C3051 | 403 071 6207 | CERAMIC | 220P | K | 50V |
| C3072 | 403 121 9509 | CERAMIC | 0.1U | Z | 50V |
| C3073 | 403 038 1603 | ELECT | 100U | M | 6.3V |
| C3074 | 403 022 7703 | CERAMIC | 33P | J | 50V |
| C3075 | 403 022 7703 | CERAMIC | 33P | J | 50V |
| C3076 | 403 001 3108 | CERAMIC | 0.1U | Z | 16V |
| C3078 | 403 038 8602 | ELECT | 33U | M | 6.3V |
| C3081 | 403 002 2506 | CERAMIC | 0.01U | M | 25V |
| C3082 | 403 121 9509 | CERAMIC | 0.1U | Z | 50V |
| C3083 | 403 049 9803 | ELECT | 2.2U | M | 50V |
| C3111 | 403 069 1207 | CERAMIC | 1000P | K | 50V |
| D3001 | 407 078 2804 | DIODE 1SS245-T-77 | | | |
| D3051 | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| OR | 407 007 9904 | DIODE GMA01-BT | | | |
| D3081 | 407 063 9504 | ZENER DIODE MTZJ8.2B-T-77 | | | |
| OR | 407 070 8101 | ZENER DIODE GZS8.2Y-BT | | | |
| D3082 | 407 099 5303 | ZENER DIODE MTZJ5.6B-T-77 | | | |
| OR | 407 051 6904 | ZENER DIODE GZS5.6Y-BT | | | |
| D3131 | 407 007 9904 | DIODE GMA01-BT | | | |
| OR | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| D3132 | 407 007 9904 | DIODE GMA01-BT | | | |
| OR | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| IC301 | 410 049 5209 | IC LC66508B-3770 | | | |
| OR | 410 058 0103 | IC LC66508B-3918 | | | |
| IC302 | 409 114 4803 | IC LB1641 | | | |
| IC303 | 409 057 3406 | IC UPC393C | | | |
| OR | 409 018 3902 | IC LA6393D | | | |
| OR | 409 003 3900 | IC BA6993 | | | |
| IC306 | 409 032 3704 | IC MN1280-R | | | |
| OR | 409 032 3803 | IC MN1280-S | | | |
| R3001 | 401 012 5708 | CARBON | 1K | JA | 1/4W |
| R3013 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3014 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3021 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3022 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3023 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3027 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3028 | 401 012 6903 | CARBON | 10K | JA | 1/4W |
| R3029 | 401 020 1907 | CARBON | 4.7K | JA | 1/4W |
| R3030 | 401 020 1907 | CARBON | 4.7K | JA | 1/4W |
| R3031 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3041 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3042 | 401 014 4006 | CARBON | 1.5K | JA | 1/4W |
| R3043 | 401 017 9701 | CARBON | 30K | JA | 1/4W |
| R3044 | 401 017 9701 | CARBON | 30K | JA | 1/4W |
| R3045 | 401 022 3008 | CARBON | 6.8K | JA | 1/4W |
| R3046 | 401 013 7206 | CARBON | 120K | JA | 1/4W |
| R3051 | 401 023 4509 | CARBON | 820K | JA | 1/4W |
| R3052 | 401 017 2702 | CARBON | 27K | JA | 1/4W |
| R3053 | 401 016 3700 | CARBON | 2.2K | JA | 1/4W |
| R3054 | 401 017 3709 | CARBON | 270K | JA | 1/4W |
| R3055 | 401 018 4804 | CARBON | 33K | JA | 1/4W |
| R3056 | 401 016 0006 | CARBON | 20K | JA | 1/4W |
| R3057 | 401 016 4707 | CARBON | 22K | JA | 1/4W |
| R3058 | 401 021 4006 | CARBON | 56K | JA | 1/4W |
| R3059 | 401 014 6000 | CARBON | 150K | JA | 1/4W |
| R3060 | 401 012 6903 | CARBON | 10K | JA | 1/4W |
| R3074 | 401 020 1907 | CARBON | 4.7K | JA | 1/4W |
| R3075 | 401 022 7105 | CARBON | 750 | JA | 1/4W |
| R3081 | 401 018 4804 | CARBON | 33K | JA | 1/4W |
| R3082 | 401 018 4804 | CARBON | 33K | JA | 1/4W |
| R3083 | 401 022 7105 | CARBON | 750 | JA | 1/4W |
| R3084 ⚠ | 402 036 4401 | FUSIBLE RES | 3.3 | JA | 1/2W |
| R3091 | 401 012 8006 | CARBON | 100K | JA | 1/4W |
| R3092 | 401 012 8006 | CARBON | 100K | JA | 1/4W |
| R3094 | 401 012 8105 | CARBON | 100K | JA | 1/4W |
| R3095 | 401 012 8006 | CARBON | 100K | JA | 1/4W |
| R3096 | 401 023 4509 | CARBON | 820K | JA | 1/4W |
| R3097 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3099 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3100 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3101 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3102 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3111 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3112 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3113 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3114 | 401 012 5609 | CARBON | 1K | JA | 1/4W |
| R3116 | 401 012 5708 | CARBON | 1K | JA | 1/4W |
| R3124 | 401 016 4707 | CARBON | 22K | JA | 1/4W |
| R3125 | 401 105 3701 | CARBON | 18K | JA | 1/4W |
| R3133 | 401 015 3800 | CARBON | 18K | JA | 1/4W |
| R3134 | 401 012 5708 | CARBON | 1K | JA | 1/4W |
| R3151 | 401 020 2805 | CARBON | 47K | JA | 1/4W |
| R3171 | 401 012 8006 | CARBON | 100K | JA | 1/4W |
| R3199 | 401 012 7009 | CARBON | 10K | JA | 1/4W |
| RB301 | 613 078 5770 | RESISTOR PACK 4.7KX3 | | | |
| OR | 613 079 3997 | RESISTOR PACK | | | |
| OR | 613 079 5922 | R-NETWORK.4.7KX3 | | | |
| RB302 | 613 078 5763 | RESISTOR PACK 3.9KX3 | | | |
| OR | 613 079 3980 | RESISTOR PACK 3.9KX3 J | | | |
| OR | 613 079 5915 | R-NETWORK.3.9KX3 | | | |
| RB303 | 613 078 5763 | RESISTOR PACK 3.9KX3 | | | |
| OR | 613 079 3980 | RESISTOR PACK 3.9KX3 J | | | |
| OR | 613 079 5915 | R-NETWORK.3.9KX3 | | | |
| XF301 | 613 016 6869 | CERAMIC RESONATOR 4MHZ | | | |
| OR | 613 016 7026 | CERAMIC RESONATOR 4MHZ | | | |

SERVŌ CIRCUIT

| LOCATION | PARTS NO. | DESCRIPTION | | | |
|---|---|---|---|---|---|
| B3502 | 405 018 2501 | TR 2SC3399-AC | | | |
| OR | 405 000 6104 | TR DTC144ES-DCTP | | | |
| C3501 | 403 059 6502 | POLYESTER | 0.022U | K | 50V |
| C3502 | 403 002 8201 | CERAMIC | 0.015U | J | 25V |
| C3503 | 403 004 3006 | CERAMIC | 6800P | J | 25V |
| C3505 | 403 002 8201 | CERAMIC | 0.015U | J | 25V |
| C3506 | 403 038 5403 | ELECT | 22U | M | 6.3V |
| C3507 | 403 038 5403 | ELECT | 22U | M | 6.3V |
| C3508 | 403 003 1102 | CERAMIC | 2200P | J | 25V |
| C3509 | 403 002 7204 | CERAMIC | 1500P | K | 25V |
| C3510 | 403 004 3006 | CERAMIC | 6800P | J | 25V |
| C3511 | 403 038 5403 | ELECT | 22U | M | 6.3V |
| C3512 | 403 038 5403 | ELECT | 22U | M | 6.3V |
| C3513 | 403 057 7501 | POLYESTER | 0.012U | K | 50V |
| C3514 | 403 071 6207 | CERAMIC | 220P | K | 50V |
| C3515 | 403 041 9405 | ELECT | 10U | M | 16V |
| C3516 | 403 050 7102 | ELECT | 3.3U | M | 50V |
| C3517 | 403 003 1102 | CERAMIC | 2200P | J | 25V |
| C3518 | 403 085 6002 | NP-ELECT | 33U | M | 16V |
| C3519 | 403 069 0309 | CERAMIC | 1000P | J | 50V |
| C3520 | 403 098 5405 | POLYESTER | 0.039U | K | 50V |
| C3521 | 403 062 0405 | POLYESTER | 0.047U | K | 50V |
| C3522 | 403 057 2902 | POLYESTER | 0.1U | K | 50V |
| C3523 | 403 057 9000 | POLYESTER | 0.12U | J | 50V |
| C3526 | 403 086 2607 | NP-ELECT | 1U | M | 50V |
| C3527 | 403 002 1509 | CERAMIC | 0.01U | J | 25V |
| C3528 | 403 048 2508 | ELECT | 0.22U | M | 50V |
| C3529 | 403 069 0309 | CERAMIC | 1000P | J | 50V |
| C3530 | 403 049 0800 | ELECT | 1U | M | 50V |
| C3531 | 403 001 1609 | CERAMIC | 0.01U | K | 16V |
| C3533 | 403 039 2609 | ELECT | 47U | M | 6.3V |
| C3534 | 403 121 9509 | CERAMIC | 0.1U | Z | 50V |
| C3537 | 403 039 2609 | ELECT | 47U | M | 6.3V |
| C3538 | 403 039 2609 | ELECT | 47U | M | 6.3V |
| C3539 | 403 004 4409 | CERAMIC | 0.068U | J | 25V |
| C3540 | 403 058 9504 | POLYESTER | 0.018U | J | 50V |
| C3541 | 403 069 1207 | CERAMIC | 1000P | K | 50V |
| D3501 | 407 007 9904 | DIODE GMA01-BT | | | |
| OR | 407 012 4406 | DIODE 1SS133-T-77 | | | |
| D3502 | 407 007 9904 | DIODE GMA01-BT | | | |
| OR | 407 012 4406 | DIODE 1SS133-T-77 | | | |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| D3503 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D3504 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D3550 | 407 012 4406 | DIODE 1SS133 |
| OR | 407 007 9904 | DIODE GMA01 |
| IC351 | 409 155 3308 | IC LC7417-8070 |
| IC352 | 409 159 8606 | IC LA7122S |
| Q3501 | 405 019 2807 | TR 2SC536-F-SPA-AC |
| OR | 405 011 8401 | TR 2SC1740S-DCTP-Q |
| Q3503 | 405 024 9907 | TR 2SD734-F-AA |
| OR | 405 024 9709 | TR 2SD734-E-AA |
| R3501 | 401 018 4804 | CARBON 33K JA 1/4W |
| R3502 | 401 012 8006 | CARBON 100K JA 1/4W |
| R3503 | 401 012 8006 | CARBON 100K JA 1/4W |
| R3506 | 401 018 5702 | CARBON 330K JA 1/4W |
| R3507 | 401 014 5102 | CARBON 15K JA 1/4W |
| R3508 | 401 014 6000 | CARBON 150K JA 1/4W |
| R3509 | 401 020 2805 | CARBON 47K JA 1/4W |
| R3510 | 401 020 2805 | CARBON 47K JA 1/4W |
| R3511 | 401 012 6903 | CARBON 10K JA 1/4W |
| R3512 | 401 018 5702 | CARBON 330K JA 1/4W |
| R3513 | 401 017 2702 | CARBON 27K JA 1/4W |
| R3514 | 401 014 6000 | CARBON 150K JA 1/4W |
| R3516 | 401 017 3709 | CARBON 270K JA 1/4W |
| R3518 | 401 016 4707 | CARBON 22K JA 1/4W |
| R3519 | 401 016 4707 | CARBON 22K JA 1/4W |
| R3520 | 401 020 9200 | CARBON 510K JA 1/4W |
| R3522 | 401 016 5704 | CARBON 220K JA 1/4W |
| R3525 | 401 018 7508 | CARBON 360 JA 1/4W |
| R3526 | 401 020 7800 | CARBON 510 JA 1/4W |
| R3527 | 401 020 7800 | CARBON 510 JA 1/4W |
| R3528 | 401 014 6000 | CARBON 150K JA 1/4W |
| R3529 | 401 012 6903 | CARBON 10K JA 1/4W |
| R3531 | 401 012 5609 | CARBON 1K JA 1/4W |
| R3532 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R3533 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R3538 | 401 012 6903 | CARBON 10K JA 1/4W |
| R3539 | 401 014 4006 | CARBON 1.5K JA 1/4W |
| R3540 | 401 012 6903 | CARBON 10K JA 1/4W |
| R3541 | 401 012 5609 | CARBON 1K JA 1/4W |
| R3542 | 401 012 6903 | CARBON 10K JA 1/4W |
| R3544 | 401 012 8006 | CARBON 100K JA 1/4W |
| R3545 | 401 014 6000 | CARBON 150K JA 1/4W |
| R3546 | 401 012 5609 | CARBON 1K JA 1/4W |
| R3547 | 401 012 5609 | CARBON 1K JA 1/4W |
| R3548 | 401 012 5609 | CARBON 1K JA 1/4W |
| R3549 | 401 014 6000 | CARBON 150K JA 1/4W |
| R3561 | 401 012 8105 | CARBON 100K JA 1/4W |
| R3562 | 401 016 4707 | CARBON 22K JA 1/4W |
| R3563 | 401 016 0006 | CARBON 20K JA 1/4W |
| R3570 | 401 020 2805 | CARBON 47K JA 1/4W |
| VR351 | 613 001 9110 | SEMI VR 220KB |

## POWER SUPPLY CIRCUIT

| | | |
|---|---|---|
| B5401 | 405 018 2808 | TR 2SC3402-AC |
| OR | 405 000 3103 | TR DTC114ES-DCTP |
| C5401 | 403 001 1609 | CERAMIC 0.01U K 16V |
| D5401 | 407 078 2705 | DIODE 1SS244-T-77 |
| D5402 | 407 053 6209 | ZENER DIODE MTZ5.1A-T-77 |
| D5403 | 407 078 2705 | DIODE 1SS244-T-77 |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| F5401 ⚠ | 423 011 8405 | FUSE 250V0.315A |
| Q5401 | 405 007 3106 | TR 2SB544-F-MP-AE |
| Q5402 | 405 016 9601 | TR 2SC3070-AE |
| R5401 | 401 021 8905 | CARBON 6.2K JA 1/4W |
| R5402 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R5403 | 401 019 7200 | CARBON 430 JA 1/4W |

## TUNER CIRCUIT

| | | |
|---|---|---|
| C6001 | 403 067 5603 | MT-COMPO 0.1U J 50V |
| OR | 403 065 8002 | MT-POLYEST 0.1U J 63V |
| C6002 | 403 046 9905 | ELECT 4.7U M 25V |
| C6003 | 403 049 0008 | ELECT 1U M 50V |
| C6004 | 403 067 5603 | MT-COMPO 0.1U J 50V |
| OR | 403 065 8002 | MT-POLYEST 0.1U J 63V |
| C6005 | 403 046 9905 | ELECT 4.7U M 25V |
| R6001 | 401 019 0904 | CARBON 390 JA 1/4W |
| R6002 | 401 019 0904 | CARBON 390 JA 1/4W |
| R6003 | 401 012 9201 | CARBON 1M JA 1/4W |
| R6004 | 401 018 5702 | CARBON 330K JA 1/4W |
| R6005 | 401 016 5704 | CARBON 220K JA 1/4W |

## TIMER CIRCUIT

| | | |
|---|---|---|
| C7001 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C7002 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C7003 | 403 121 9509 | CERAMIC 0.1U Z 50V |
| C7004 | 403 050 2800 | ELECT 22U M 50V |
| C7005 | 403 071 2001 | CERAMIC 180P K 50V |
| C7006 | 403 067 5603 | MT-COMPO 0.1U J 50V |
| OR | 403 065 8002 | MT-POLYEST 0.1U J 63V |
| C7007 | 403 067 7300 | MT-COMPO 0.33U J 50V |
| OR | 403 115 1007 | MT-POLYEST 0.33U J 63V |
| D7001 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7002 | 407 053 3109 | ZENER DIODE MTZ12A-T-77 |
| IC701 | 409 148 5005 | IC M6M80021P |
| OR | 409 151 7904 | IC M6M80011P |
| IC702 | 409 019 6209 | IC LA7910 |
| IC703 | 409 026 8203 | IC L5631 |
| OR | 409 057 5103 | IC UPC574J |
| Q7001 | 405 016 5009 | TR 2SC2960-F |
| OR | 405 016 5108 | TR 2SC2960-G |
| Q7002 | 405 006 7006 | TR 2SA984K-E-AA |
| OR | 405 006 7204 | TR 2SA984K-F-AA |
| R7001 | 401 019 1901 | CARBON 3.9K JA 1/4W |
| R7002 | 401 012 6903 | CARBON 10K JA 1/4W |
| R7003 | 401 018 4804 | CARBON 33K JA 1/4W |
| R7004 | 401 012 6903 | CARBON 10K JA 1/4W |
| R7005 | 401 020 2805 | CARBON 47K JA 1/4W |
| R7006 | 401 016 4707 | CARBON 22K JA 1/4W |
| R7007 | 401 020 1907 | CARBON 4.7K JA 1/4W |
| R7008 | 401 023 1607 | CARBON 820 JA 1/4W |
| R7009 | 401 018 3708 | CARBON 3.3K JA 1/4W |
| R7010 | 401 014 5102 | CARBON 15K JA 1/4W |

## RF CONVERTER CIRCUIT

| | | |
|---|---|---|
| C6601 | 403 038 1603 | ELECT 100U M 6.3V |
| C6602 | 403 038 1603 | ELECT 100U M 6.3V |
| D6601 | 407 004 9709 | DIODE DSK10C-BT |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| D6601 | 407 005 8701 | DIODE ERA15-02A-V5 |
| L6601 | 613 015 6631 | HF CHOKE 15UH K |
| L6602 | 613 015 6631 | HF CHOKE 15UH K |

## COMPL.VD-1

| | | |
|---|---|---|
| CUMPL.NO. | 613 084 5221 | |
| B1001 | 405 003 7207 | TR 2SA1342-TB |
| OR | 405 000 1109 | TR DTA124EK-T96 |
| B1002 | 405 018 2006 | TR 2SC3396-TB |
| B1201 | 405 018 2006 | TR 2SC3396-TB |
| B1202 | 405 018 2006 | TR 2SC3396-TB |
| B1290 | 405 018 2501 | TR 2SC3399 |
| OR | 405 001 0408 | TR RN1204 |
| C1002 | 403 134 7509 | CERAMIC 5P J 50V |
| C1003 | 403 024 7206 | CERAMIC 390P J 50V |
| C1004 | 403 009 5807 | CERAMIC 100P J 50V |
| C1005 | 403 026 2902 | CERAMIC 47P J 50V |
| C1006 | 403 048 6902 | ELECT 0.47U M 50V |
| C1007 | 403 026 2902 | CERAMIC 47P J 50V |
| C1008 | 403 011 5000 | CERAMIC 120P J 50V |
| C1009 | 403 086 5400 | NP-ELECT 2.2U M 50V |
| C1010 | 403 050 0509 | ELECT 2.2U M 50V |
| C1011 | 403 048 4809 | ELECT 0.33U M 50V |
| C1012 | 403 022 8304 | CERAMIC 33P J 50V |
| C1013 | 403 033 4609 | CERAMIC 82P J 50V |
| C1014 | 403 009 5807 | CERAMIC 100P J 50V |
| C1016 | 403 063 2200 | POLYESTER 0.068U K 50V |
| C1017 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1018 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1019 | 403 068 0409 | CERAMIC 0.1U Z 25V |
| C1020 | 403 039 2609 | ELECT 47U M 6.3V |
| C1021 | 403 050 0509 | ELECT 2.2U M 50V |
| C1022 | 403 085 4008 | NP-ELECT 10U M 16V |
| C1023 | 403 050 0509 | ELECT 2.2U M 50V |
| C1024 | 403 024 2102 | CERAMIC 39P J 50V |
| C1025 | 403 031 2201 | CERAMIC 680P J 50V |
| C1026 | 403 048 6902 | ELECT 0.47U M 50V |
| C1027 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1028 | 403 009 5807 | CERAMIC 100P J 50V |
| C1029 | 403 074 3104 | CERAMIC 0.047U Z 50V |
| C1101 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1102 | 403 041 2109 | ELECT 47U M 10V |
| C1103 | 403 041 2109 | ELECT 47U M 10V |
| C1104 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1105 | 403 049 0800 | ELECT 1U M 50V |
| C1106 | 403 022 8304 | CERAMIC 33P J 50V |
| C1107 | 403 134 7509 | CERAMIC 5P J 50V |
| C1108 | 403 028 4201 | CERAMIC 56P J 50V |
| C1109 | 403 051 0607 | ELECT 4.7U M 50V |
| C1110 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1111 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1112 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1113 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1201 | 403 028 0203 | CERAMIC 51P J 50V |
| C1202 | 403 073 4201 | CERAMIC 3900P K 50V |
| C1203 | 403 049 0800 | ELECT 1U M 50V |
| C1204 | 403 012 6907 | CERAMIC 15P J 50V |
| C1205 | 403 059 6007 | POLYESTER 0.022U K 50V |
| C1206 | 403 049 0800 | ELECT 1U M 50V |
| C1207 | 403 024 2102 | CERAMIC 39P J 50V |
| C1208 | 403 074 3104 | CERAMIC 0.047U Z 50V |
| C1209 | 403 039 2609 | ELECT 47U M 6.3V |
| C1210 | 403 028 0203 | CERAMIC 51P J 50V |
| C1211 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1212 | 403 017 5004 | CERAMIC 200P J 50V |
| C1213 | 403 049 0800 | ELECT 1U M 50V |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| C1214 | 403 013 3103 | CERAMIC 150P J 50V |
| C1215 | 403 013 3103 | CERAMIC 150P J 50V |
| C1216 | 403 002 2902 | CERAMIC 0.01U M 25V |
| C1217 | 403 074 3104 | CERAMIC 0.047U Z 50V |
| C1218 | 403 009 5807 | CERAMIC 100P J 50V |
| C1219 | 403 049 0800 | ELECT 1U M 50V |
| C1220 | 403 039 2708 | ELECT 47U M 6.3V |
| C1221 | 403 074 3104 | CERAMIC 0.047U Z 50V |
| C1222 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1223 | 403 072 1607 | CERAMIC 0.022U K 50V |
| C1224 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1225 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1226 | 403 049 0800 | ELECT 1U M 50V |
| C1227 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1228 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1229 | 403 022 2708 | CERAMIC 30P J 50V |
| C1230 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1231 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1232 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1233 | 403 028 9909 | CERAMIC 560P J 50V |
| C1234 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1235 | 403 069 5700 | CERAMIC 0.01U K 50V |
| C1236 | 403 069 5601 | CERAMIC 0.01U K 50V |
| C1237 | 403 013 3103 | CERAMIC 150P J 50V |
| C1238 | 403 020 8108 | CERAMIC 3P C 50V |
| C1239 | 403 040 2209 | ELECT 22U M 10V |
| C1240 | 403 071 1509 | CERAMIC 180P J 50V |
| C1290 | 403 049 0800 | ELECT 1U M 50V |
| C1501 | 403 049 0800 | ELECT 1U M 50V |
| C1502 | 403 038 9708 | ELECT 330U M 6.3V |
| C1503 | 403 047 0604 | ELECT 4.7U M 25V |
| C1504 | 403 039 2609 | ELECT 47U M 6.3V |
| D1001 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| D1003 | 407 003 3609 | DIODE DAN202K-T-96 |
| D1004 | 407 003 3609 | DIODE DAN202K-T-96 |
| D1101 | 407 070 8408 | ZENER DIODE GZS9.1Y-TB |
| OR | 407 053 8906 | ZENER DIODE MTZ9.1C-T-77 |
| D1102 | 407 051 7802 | ZENER DIODE GZS7.5Y-BT |
| OR | 407 053 8104 | ZENER DIODE MTZ7.5C-T-77 |
| D1501 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| D1502 | 407 051 6706 | ZENER DIODE GZS5.1Y-BT |
| OR | 407 053 6407 | ZENER DIODE MTZ5.1C-T-77 |
| D1503 | 407 003 4507 | DIODE DAP202K-T-96 |
| DL121 | 613 077 4118 | DELAY.2H |
| OR | 613 089 7213 | DELAY.2H |
| F1001 | 613 004 5539 | LC PACK 4MHZ LPF |
| F1201 | 613 079 2402 | FILTER 1.4M.4.43M.5.06MHZ |
| F1202 | 613 082 5551 | FILTER 1.4MHZ LPF |
| IC101 | 409 156 6902 | IC LA7322-N |
| IC111 | 409 148 4800 | IC TL8709P |
| IC121 | 409 074 5803 | IC TA8632N |
| J1054 | 401 035 4108 | MT-GLAZE 0.000 ZA 1/8W |
| J1057 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J1066 | 401 035 4108 | MT-GLAZE 0.000 ZA 1/8W |
| J1081 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J1082 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| L1001 | 613 014 1187 | HF CHOKE 68UH J |
| L1003 | 613 014 0975 | HF CHOKE 100UH K |
| L1101 | 613 014 0944 | HF CHOKE 56UH K |
| L1102 | 613 014 0913 | HF CHOKE 33UH K |
| L1201 | 613 014 1118 | HF CHOKE 18UH J |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| L1202 | 613 014 1088 | HF CHOKE 10UH J |
| L1203 | 613 014 0999 | HF CHOKE 150UH K |
| L1204 | 613 014 0906 | HF CHOKE 27UH K |
| L1205 | 613 014 0876 | HF CHOKE 15UH K |
| L1209 | 613 015 7409 | HF CHOKE 100UH K |
| Q1001 | 405 001 9906 | TR 2SA1037K-T96-FQ |
| OR | 405 002 6508 | TR 2SA1179-M5-TB |
| OR | 405 002 6706 | TR 2SA1179-M6-TB |
| OR | 405 002 0001 | TR 2SA1037K-FR-T96 |
| Q1002 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1003 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1101 | 405 001 9906 | TR 2SA1037K-T96-FQ |
| OR | 405 002 6508 | TR 2SA1179-M5-TB |
| OR | 405 002 6706 | TR 2SA1179-M6-TB |
| OR | 405 002 0001 | TR 2SA1037K-FR-T96 |
| Q1102 | 405 001 9906 | TR 2SA1037K-T96-FQ |
| OR | 405 002 6508 | TR 2SA1179-M5-TB |
| OR | 405 002 6706 | TR 2SA1179-M6-TB |
| OR | 405 002 0001 | TR 2SA1037K-FR-T96 |
| Q1201 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1202 | 405 001 9906 | TR 2SA1037K-T96-FQ |
| OR | 405 002 6508 | TR 2SA1179-M5-TB |
| OR | 405 002 6706 | TR 2SA1179-M6-TB |
| OR | 405 002 0001 | TR 2SA1037K-FR-T96 |
| Q1203 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1204 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1205 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1206 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1501 | 405 043 6000 | TR 2SC3807 |
| Q1502 | 405 006 6504 | TR 2SA984-E-AA |
| OR | 405 006 6702 | TR 2SA984-F-AA |
| Q1503 | 405 014 4004 | TR 2SC2412K-T96-BQ |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| OR | 405 015 8704 | TR 2SC2812-L6-TB |
| OR | 405 014 4103 | TR 2SC2412K-BR-T96 |
| Q1504 | 405 006 6504 | TR 2SA984-E-AA |
| OR | 405 006 6702 | TR 2SA984-F-AA |
| Q1505 | 405 009 7003 | TR 2SB985-T-AE |
| Q1506 | 405 019 2005 | TR 2SC536-E-SPA-AC |
| OR | 405 019 2807 | TR 2SC536-F-SPA-AC |
| OR | 405 011 8401 | TR 2SC1740S-DCTP-Q |
| OR | 405 011 8500 | TR 2SC1740S-DCTP-R |
| Q1507 | 405 006 6504 | TR 2SA984-E-AA |
| OR | 405 006 6702 | TR 2SA984-F-AA |
| Q1508 | 405 019 3903 | TR 2SC536-G-SPA-AC |
| OR | 405 019 2807 | TR 2SC536-F-SPA-AC |
| OR | 405 011 8500 | TR 2SC1740S-DCTP-R |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| Q1508 | 405 011 8609 | TR 2SC1740S-DCTP-S |
| R1005 | 401 037 5806 | MT-GLAZE 1M JA 1/10W |
| R1012 | 401 037 5806 | MT-GLAZE 1M JA 1/10W |
| R1020 | 401 022 1806 | CARBON 680 JA 1/4W |
| R1026 | 401 038 0701 | MT-GLAZE 2.2K JA 1/10W |
| R1027 | 401 038 6604 | MT-GLAZE 470K JA 1/10W |
| R1029 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R1101 | 401 020 7404 | CARBON 51 JA 1/4W |
| R1102 | 401 021 1807 | CARBON 560 JA 1/4W |
| R1106 | 401 020 7404 | CARBON 51 JA 1/4W |
| R1107 | 401 019 9501 | CARBON 47 JA 1/4W |
| R1202 | 401 038 6505 | MT-GLAZE 47K JA 1/10W |
| R1207 | 401 038 3801 | MT-GLAZE 330K JA 1/10W |
| R1208 | 401 038 3207 | MT-GLAZE 300K JA 1/10W |
| R1216 | 401 037 7909 | MT-GLAZE 1.5K JA 1/10W |
| R1217 | 401 038 3504 | MT-GLAZE 330 JA 1/10W |
| R1218 | 401 012 5609 | CARBON 1K JA 1/4W |
| R1229 | 401 038 7601 | MT-GLAZE 560 JA 1/10W |
| R1235 | 401 035 6607 | MT-GLAZE 120 JA 1/8W |
| R1501 | 401 036 8105 | MT-GLAZE 470 JA 1/8W |
| R1509 | 401 036 1403 | MT-GLAZE 220 JA 1/8W |
| R1512 | 401 020 2805 | CARBON 47K JA 1/4W |
| VR101 | 613 001 9424 | SEMI VR 20KB |
| OR | 613 001 9059 | SEMI VR 22KB |
| VR102 | 613 001 9424 | SEMI VR 20KB |
| OR | 613 001 9059 | SEMI VR 22KB |
| VR103 | 613 001 9394 | SEMI VR 5KB |
| OR | 613 001 9004 | SEMI VR 3.3KB |
| VR104 | 613 001 9417 | SEMI VR 10KB |
| OR | 613 001 9035 | SEMI VR 10KB |
| VR111 | 613 001 9370 | SEMI VR 1KB |
| OR | 613 001 8977 | SEMI VR 1KB |
| VR121 | 613 001 9448 | SEMI VR 50KB |
| OR | 613 001 9073 | SEMI VR 47KB |
| X1201 | 613 002 7818 | CRYSTAL 4.433619MHZ 16PF |
| OR | 613 002 7900 | CRYSTAL 4.433619MHZ |
| CŌMPL,VD-2 | | |
| COMPL.NO. | 613 078 6197 | |
| C1301 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1302 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1303 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1304 | 403 039 2609 | ELECT 47U M 6.3V |
| C1306 | 403 046 2104 | ELECT 3.3U M 25V |
| C1307 | 403 046 2104 | ELECT 3.3U M 25V |
| C1308 | 403 047 0604 | ELECT 4.7U M 25V |
| C1309 | 403 038 2006 | ELECT 100U M 6.3V |
| D1301 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| D1302 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| IC131 | 409 074 3502 | IC LA7311 |
| L1301 | 613 015 6730 | HF CHOKE 100UH K |
| R1301 | 401 013 6308 | CARBON 12K JA 1/4W |
| R1302 | 401 012 9201 | CARBON 1M JA 1/4W |
| R1303 | 401 012 5609 | CARBON 1K JA 1/4W |
| R1304 | 401 013 6308 | CARBON 12K JA 1/4W |
| R1305 | 401 012 9201 | CARBON 1M JA 1/4W |
| R1306 | 401 012 6903 | CARBON 10K JA 1/4W |
| R1307 | 401 023 1607 | CARBON 820 JA 1/4W |
| R1308 | 401 105 3701 | CARBON 18K JA 1/4W |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| R2013 | 401 012 5609 | CARBON 1K JA 1/4W |
| R2014 | 401 015 2605 | CARBON 1.8K JA 1/4W |
| R2016 | 401 012 6903 | CARBON 10K JA 1/4W |
| R2017 | 401 012 6903 | CARBON 10K JA 1/4W |
| R2018 | 401 015 3800 | CARBON 18K JA 1/4W |
| R2021 | 401 012 3308 | CARBON 10 JA 1/4W |
| R2022 | 401 019 9501 | CARBON 47 JA 1/4W |
| R2023 | 401 014 5102 | CARBON 15K JA 1/4W |
| R2024 | 401 019 6104 | CARBON 4.7 JA 1/4W |
| R2034 | 401 012 4404 | CARBON 100 JA 1/4W |
| R2035 | 401 016 5704 | CARBON 220K JA 1/4W |
| R2041 | 401 020 1907 | CARBON 4.7K JA 1/4W |
| R2071 | 401 013 4106 | CARBON 120 JA 1/4W |
| R2072 | 401 012 6903 | CARBON 10K JA 1/4W |
| T2001 | 613 016 2205 | OSC COIL 70KHZ |
| VR201 | 613 002 0468 | SEMI VR 100KB |
| VR202 | 613 002 0406 | SEMI VR 10KB |
| CŌMPL,PW-1 | | |
| COMPL.NO. | 613 087 3095 | |
| | 613 041 5967 | COVER.FUSE |
| C5001 ⚠ | 404 031 1201 | MT-COMPO 4700P M 250V |
| C5101 | 403 110 1705 | ELECT 2200U M 25V |
| OR | 403 148 0701 | ELECT 2200U M 25V |
| C5102 | 403 110 1705 | ELECT 2200U M 25V |
| OR | 403 148 0701 | ELECT 2200U M 25V |
| C5103 | 403 141 5000 | ELECT 4700U M 16V |
| OR | 403 158 0609 | ELECT 4700U M 16V |
| C5104 | 403 051 3103 | ELECT 47U M 50V |
| C5105 | 403 110 1408 | ELECT 47U M 100V |
| OR | 403 155 5805 | ELECT 47U M 100V |
| C5106 | 403 051 0607 | ELECT 4.7U M 50V |
| C5107 | 403 054 0703 | ELECT 47U M 35V |
| C5108 | 403 039 2104 | ELECT 47U M 6.3V |
| C5109 | 403 043 9106 | ELECT 47U M 16V |
| C5110 | 403 043 6006 | ELECT 330U M 16V |
| C5112 | 403 065 8002 | MT-POLYEST 0.1U J 63V |
| D5101 | 407 004 9709 | DIODE DSK10C-BT |
| OR | 407 005 8701 | DIODE ERA15-02A-V5 |
| D5102 | 407 004 9709 | DIODE DSK10C-BT |
| OR | 407 005 8701 | DIODE ERA15-02A-V5 |
| D5103 | 407 004 6708 | DIODE DSA17C-KC6 |
| D5104 | 407 004 6708 | DIODE DSA17C-KC6 |
| D5105 | 407 003 9205 | DIODE DBB10-C |
| D5106 | 407 078 2705 | DIODE 1SS244-T-77 |
| D5107 | 407 078 2705 | DIODE 1SS244-T-77 |
| D5108 | 407 078 1104 | ZENER DIODE MTZ33A-T-77 |
| OR | 407 051 6003 | ZENER DIODE GZS33X-BT |
| D5109 | 407 053 8104 | ZENER DIODE MTZ7.5C-T-77 |
| OR | 407 051 7802 | ZENER DIODE GZS7.5Y-BT |
| D5110 | 407 078 0305 | ZENER DIODE MTZ24B-T-77 |
| OR | 407 070 3502 | ZENER DIODE GZS24Y-BT |
| F5001 ⚠ | 423 003 3708 | FUSE 250V 0.4A |
| F5101 ⚠ | 423 004 3004 | FUSE 250V 0.8A |
| F5102 ⚠ | 423 005 4901 | FUSE 250V 1.6A |
| F5103 ⚠ | 423 006 1305 | FUSE 250V 2A |
| F5104 ⚠ | 423 011 8405 | FUSE 250V0.315A |
| Q5101 | 405 006 7204 | TR 2SA984K-F-AA |
| OR | 405 006 7006 | TR 2SA984K-E-AA |
| R5102 | 401 019 7705 | CARBON 4.3K JA 1/4W |
| R5103 | 401 019 7705 | CARBON 4.3K JA 1/4W |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| R5104 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R5105 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R5107 | 401 019 7705 | CARBON 4.3K JA 1/4W |
| R5108 | 402 023 2106 | FUSIBLE RES 47 JA 1/4W |
| R5109 | 401 013 6308 | CARBON 12K JA 1/4W |
| R5110 | 401 014 2804 | CARBON 150 JA 1/4W |
| R5111 | 401 014 2804 | CARBON 150 JA 1/4W |
| CŌMPL,PW-2 | | |
| COMPL.NO. | 613 078 6579 | |
| IC521 | 409 149 6704 | IC STK5473 |
| IF PACK | | |
| COMPL.NO. | 613 092 9396 | |
| C6101 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6104 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6105 | 403 065 8101 | MT-POLYEST 0.22U J 63V |
| C6106 | 403 057 0502 | POLYESTER 0.01U K 50V |
| C6107 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6108 | 403 043 9700 | ELECT 47U M 16V |
| C6109 | 403 068 0409 | CERAMIC 0.1U Z 25V |
| C6110 | 403 047 0802 | ELECT 4.7U M 25V |
| C6111 | 403 028 4102 | CERAMIC 56P J 50V |
| C6112 | 403 069 1702 | CERAMIC 1000P K 50V |
| C6113 | 403 114 3606 | CERAMIC 100P J 50V |
| C6114 | 403 026 2803 | CERAMIC 47P J 50V |
| C6115 | 403 109 9200 | CERAMIC 27P J 50V |
| C6116 | 403 030 7207 | CERAMIC 68P J 50V |
| C6117 | 403 033 4708 | CERAMIC 82P J 50V |
| C6118 | 403 073 9107 | CERAMIC 4700P K 50V |
| C6119 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6120 | 403 069 1702 | CERAMIC 1000P K 50V |
| C6121 | 403 049 1005 | ELECT 1U M 50V |
| C6122 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6123 | 403 050 7201 | ELECT 3.3U M 50V |
| C6124 | 403 042 3006 | ELECT 100U M 16V |
| C6125 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6141 | 403 068 0409 | CERAMIC 0.1U Z 25V |
| C6142 | 403 073 0005 | CERAMIC 3300P K 50V |
| C6143 | 403 072 8507 | CERAMIC 330P K 50V |
| C6144 | 403 008 4009 | CERAMIC 10P C 50V |
| C6145 | 403 072 3403 | CERAMIC 0.022U Z 50V |
| C6146 | 403 069 9500 | CERAMIC 0.01U Z 50V |
| C6147 | 403 028 4409 | CERAMIC 56P J 50V |
| D6101 | 407 053 8906 | ZENER DIODE MTZ9.1C |
| IC611 | 409 111 2901 | IC M51496P |
| J6101 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6102 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6103 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6104 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6105 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6106 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6107 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6109 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6110 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6112 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| J6118 | 401 037 5004 | MT-GLAZE 0.000 ZA 1/10W |
| L6102 | 613 014 2061 | HF CHOKE |
| L6103 | 613 014 0739 | HF CHOKE 1.0UH M |
| L6105 | 613 014 0838 | HF CHOKE |
| L6106 | 613 014 0883 | HF CHOKE 18UH K |
| L6107 | 613 014 4072 | HF CHOKE |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| R1309 | 401 016 4707 | CARBON 22K JA 1/4W |
| R1310 | 401 016 4707 | CARBON 22K JA 1/4W |
| CŌMPL.VP-1 | | |
| COMPL.NO. | 613 077 1735 | |
| C1801 | 403 073 7004 | CERAMIC 470P K 50V |
| C1802 | 403 068 9402 | CERAMIC 100P K 50V |
| C1803 | 403 003 3304 | CERAMIC 0.022U M 25V |
| C1804 | 403 049 0800 | ELECT 1U M 50V |
| C1805 | 403 003 1805 | CERAMIC 2200P M 25V |
| C1806 | 403 003 7104 | CERAMIC 0.033U M 25V |
| C1807 | 403 009 1809 | CERAMIC 10P J 50V |
| C1808 | 403 014 2600 | CERAMIC 18P J 50V |
| C1809 | 403 003 7104 | CERAMIC 0.033U M 25V |
| C1810 | 403 003 1805 | CERAMIC 2200P M 25V |
| C1811 | 403 039 2609 | ELECT 47U M 6.3V |
| C1812 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1813 | 403 014 2600 | CERAMIC 18P J 50V |
| C1814 | 403 026 2209 | CERAMIC 47P J 50V |
| C1815 | 403 030 6309 | CERAMIC 68P J 50V |
| C1816 | 403 022 7703 | CERAMIC 33P J 50V |
| C1817 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1818 | 403 043 9601 | ELECT 47U M 16V |
| C1819 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1820 | 403 003 3304 | CERAMIC 0.022U M 25V |
| C1821 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1822 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C1823 | 403 069 1207 | CERAMIC 1000P K 50V |
| D1801 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| IC181 | 409 134 2001 | IC LA7320 |
| L1801 | 613 014 0968 | HF CHOKE 82UH K |
| L1802 | 613 014 0951 | HF CHOKE 68UH K |
| L1803 | 613 015 6730 | HF CHOKE 100UH K |
| L1804 | 613 014 0883 | HF CHOKE 18UH K |
| L1805 | 613 014 0876 | HF CHOKE 15UH K |
| L1806 | 613 014 0876 | HF CHOKE 15UH K |
| L1807 | 613 014 0944 | HF CHOKE 56UH K |
| L1808 | 613 015 6730 | HF CHOKE 100UH K |
| Q1801 | 405 016 1100 | TR 2SC2839-F-SPA-AC |
| OR | 405 016 0905 | TR 2SC2839-E-SPA-AC |
| OR | 405 015 2603 | TR 2SC2669-Y-TPE4 |
| OR | 405 015 2504 | TR 2SC2669-O-TPE4 |
| OR | 405 012 9506 | TR 2SC2058S-DCTP-Q |
| Q1802 | 405 016 1100 | TR 2SC2839-F-SPA-AC |
| OR | 405 016 0905 | TR 2SC2839-E-SPA-AC |
| OR | 405 015 2603 | TR 2SC2669-Y-TPE4 |
| OR | 405 015 2504 | TR 2SC2669-O-TPE4 |
| OR | 405 012 9506 | TR 2SC2058S-DCTP-Q |
| Q1803 | 405 016 1100 | TR 2SC2839-F-SPA-AC |
| OR | 405 016 0905 | TR 2SC2839-E-SPA-AC |
| OR | 405 015 2603 | TR 2SC2669-Y-TPE4 |
| OR | 405 015 2504 | TR 2SC2669-O-TPE4 |
| OR | 405 012 9506 | TR 2SC2058S-DCTP-Q |
| R1801 | 401 013 5202 | CARBON 1.2K JA 1/4W |
| R1802 | 401 016 2505 | CARBON 220 JA 1/4W |
| R1804 | 401 020 5509 | CARBON 5.1 JA 1/4W |
| R1806 | 401 013 5202 | CARBON 1.2K JA 1/4W |
| R1807 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R1808 | 401 023 1607 | CARBON 820 JA 1/4W |
| R1809 | 401 023 1607 | CARBON 820 JA 1/4W |
| R1810 | 401 017 0708 | CARBON 270 JA 1/4W |
| R1811 | 401 021 1807 | CARBON 560 JA 1/4W |

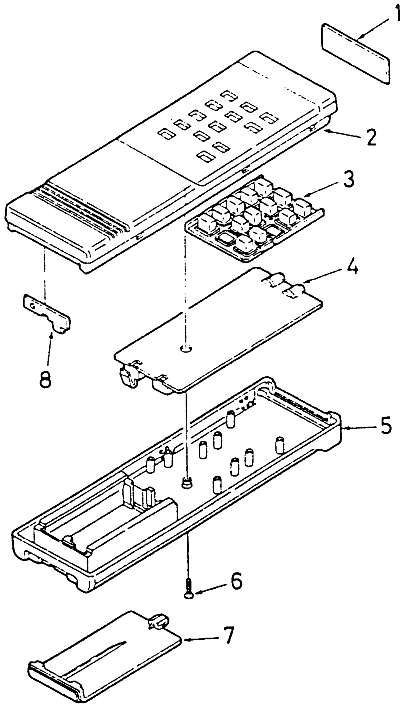
| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| R1812 | 401 023 1607 | CARBON 820 JA 1/4W |
| R1813 | 401 019 0904 | CARBON 390 JA 1/4W |
| R1814 | 401 019 0904 | CARBON 390 JA 1/4W |
| R1815 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R1816 | 401 016 3700 | CARBON 2.2K JA 1/4W |
| R1817 | 401 012 5609 | CARBON 1K JA 1/4W |
| R1818 | 401 015 1509 | CARBON 180 JA 1/4W |
| VR181 | 613 002 0345 | SEMI VR 1KB |
| VR182 | 613 002 0345 | SEMI VR 1KB |
| CŌMPL.AD-1 | | |
| COMPL.NO. | 613 079 7445 | |
| C2001 | 403 049 1401 | ELECT 1U M 50V |
| C2002 | 403 075 4506 | CERAMIC 820P K 50V |
| C2004 | 403 038 8602 | ELECT 33U M 6.3V |
| C2005 | 403 003 0600 | CERAMIC 0.018U K 25V |
| C2006 | 403 048 6308 | ELECT 0.47U M 50V |
| C2007 | 403 001 7007 | CERAMIC 3900P K 16V |
| C2008 | 403 001 6505 | CERAMIC 3300P K 16V |
| C2009 | 403 039 2104 | ELECT 47U M 6.3V |
| C2010 | 403 041 8804 | ELECT 10U M 16V |
| C2013 | 403 003 2406 | CERAMIC 0.022U J 25V |
| C2015 | 403 046 9905 | ELECT 4.7U M 25V |
| C2016 | 403 049 0008 | ELECT 1U M 50V |
| C2017 | 403 043 3906 | ELECT 33U M 16V |
| C2018 | 403 046 9905 | ELECT 4.7U M 25V |
| C2019 | 403 043 9106 | ELECT 47U M 16V |
| C2020 | 403 071 6207 | CERAMIC 220P K 50V |
| C2021 | 403 081 7409 | POLYPRO 0.033U J 100V |
| C2022 | 403 002 1905 | CERAMIC 0.01U K 25V |
| C2024 | 403 002 1905 | CERAMIC 0.01U K 25V |
| C2025 | 403 003 3700 | CERAMIC 0.022U Z 25V |
| C2030 | 403 049 0008 | ELECT 1U M 50V |
| C2031 | 403 049 0008 | ELECT 1U M 50V |
| C2032 | 403 049 0008 | ELECT 1U M 50V |
| C2033 | 403 043 3906 | ELECT 33U M 16V |
| C2034 | 403 049 0008 | ELECT 1U M 50V |
| C2071 | 403 075 4506 | CERAMIC 820P K 50V |
| C2072 | 403 049 0008 | ELECT 1U M 50V |
| C2073 | 403 003 8606 | CERAMIC 0.039U J 25V |
| C2075 | 403 046 1602 | ELECT 3.3U M 25V |
| D2002 | 407 012 4406 | DIODE 1SS133-T-77 |
| OR | 407 007 9904 | DIODE GMA01-BT |
| IC201 | 409 133 1401 | IC LA7294 |
| IC202 | 409 018 7603 | IC LA7016 |
| L2001 | 613 015 5474 | HF CHOKE 27MH |
| L2002 | 613 014 3037 | HF CHOKE 10MH J |
| L2003 | 613 015 8550 | CHOKE COIL 560UH K |
| Q2001 | 405 024 9709 | TR 2SD734-E-AA |
| OR | 405 024 9907 | TR 2SD734-F-AA |
| R2001 | 401 012 4404 | CARBON 100 JA 1/4W |
| R2002 | 401 022 3008 | CARBON 6.8K JA 1/4W |
| R2003 | 401 013 4106 | CARBON 120 JA 1/4W |
| R2004 | 401 019 3905 | CARBON 390K JA 1/4W |
| R2005 | 401 021 8905 | CARBON 6.2K JA 1/4W |
| R2006 | 401 017 1705 | CARBON 2.7K JA 1/4W |
| R2007 | 401 023 2703 | CARBON 8.2K JA 1/4W |
| R2008 | 401 017 1705 | CARBON 2.7K JA 1/4W |
| R2009 | 401 018 6501 | CARBON 3.3M JA 1/4W |
| R2010 | 401 012 6903 | CARBON 10K JA 1/4W |
| R2011 | 401 023 7401 | CARBON 9.1K JA 1/4W |
| R2012 | 401 019 7705 | CARBON 4.3K JA 1/4W |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| RB713 | 613 088 2707 | R-NETWORK.100KX13 |
| RR711 | 613 000 2181 | REMOCON RECEIVER |
| S7101 | 613 077 4354 | PUSH SWITCH.PLAY |
| OR | 613 079 4154 | PUSH SWITCH.PLAY |
| S7102 | 613 077 4354 | PUSH SWITCH.STOP |
| OR | 613 079 4154 | PUSH SWITCH.STOP |
| S7103 | 613 077 4354 | PUSH SWITCH.STILL |
| OR | 613 079 4154 | PUSH SWITCH.STILL |
| S7105 | 613 006 3632 | PUSH SWITCH.PROG |
| S7106 | 613 006 3632 | PUSH SWITCH.UP |
| S7113 | 613 077 4354 | PUSH SWITCH.REC |
| OR | 613 079 4154 | PUSH SWITCH.REC |
| S7117 | 613 006 3632 | PUSH SWITCH.CLOCK |
| S7118 | 613 006 3632 | PUSH SWITCH.DOWN |
| S7125 | 613 077 4354 | PUSH SWITCH.REW |
| OR | 613 079 4154 | PUSH SWITCH.REW |
| S7126 | 613 077 4354 | PUSH SWITCH.FF |
| OR | 613 079 4154 | PUSH SWITCH.FF |
| S7129 | 613 006 3632 | PUSH SWITCH.PRESET |
| S7130 | 613 006 3632 | PUSH SWITCH.OK |
| S7131 | 613 006 3632 | PUSH SWITCH |
| S7137 | 613 077 4354 | PUSH SWITCH.ALL CLEAR |
| OR | 613 079 4154 | PUSH SWITCH.ALL CLEAR |
| X7101 | 613 022 4569 | CRYSTAL 6.291456MHZ |
| X7102 | 613 002 8457 | CRYSTAL 32.768KHZ |
| OR | 613 002 8594 | CRYSTAL 32.768KHZ |
| CŌMPL.TM-2 | | |
| COMPL.NO. | 613 090 4980 | |
| S7208 | 613 077 4354 | PUSH SWITCH.TRAC + |
| OR | 613 079 4154 | PUSH SWITCH.TRAC + |
| S7214 | 613 006 3649 | PUSH SWITCH.EJECT |
| S7220 | 613 077 4354 | PUSH SWITCH.TRAC - |
| OR | 613 079 4154 | PUSH SWITCH.TRAC - |
| CŌMPL.TM-3 | | |
| COMPL.NO. | 613 093 5229 | |
| B7301 | 405 003 7603 | TR 2SA1345-AC |
| OR | 405 000 2205 | TR DTA144ES-DCTP |
| B7302 | 405 018 2501 | TR 2SC3399-AC |
| OR | 405 000 6104 | TR DTC144ES-DCTP |
| C7301 | 403 042 7707 | ELECT 22U M 16V |
| C7302 | 403 048 4205 | ELECT 0.33U M 50V |
| C7303 | 403 041 8804 | ELECT 10U M 16V |
| C7304 | 403 048 4205 | ELECT 0.33U M 50V |
| C7305 | 403 001 5003 | CERAMIC 2200P K 16V |
| C7306 | 403 069 1207 | CERAMIC 1000P K 50V |
| C7307 | 403 042 7707 | ELECT 22U M 16V |
| C7308 | 403 121 9509 | CERAMIC 0.1U Z 50V |
| C7311 | 403 155 2804 | DL-ELECT 0.047F Z 5.5V |
| D7301 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| IC731 | 409 114 4308 | IC LA7214 |
| Q7301 | 405 009 7003 | TR 2SB985-T-AE |
| Q7302 | 405 057 6409 | TR 2SC4038-R-TL2 |
| OR | 405 057 6300 | TR 2SC4038-S-TL2 |
| Q7303 | 405 027 8709 | TR 2SK68A-K |
| OR | 405 057 9301 | TR 2SK68A-L1 |
| R7301 | 401 020 2805 | CARBON 47K JA 1/4W |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| R7302 | 401 013 5202 | CARBON 1.2K JA 1/4W |
| R7303 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7304 | 401 012 6903 | CARBON 10K JA 1/4W |
| R7305 | 401 012 9201 | CARBON 1M JA 1/4W |
| R7306 | 401 017 3709 | CARBON 270K JA 1/4W |
| R7308 | 401 012 6903 | CARBON 10K JA 1/4W |
| R7309 | 401 020 3802 | CARBON 470K JA 1/4W |
| R7310 | 401 018 5702 | CARBON 330K JA 1/4W |
| R7311 | 401 018 2701 | CARBON 330 JA 1/4W |
| R7312 | 401 018 5702 | CARBON 330K JA 1/4W |
| R7313 | 401 017 3709 | CARBON 270K JA 1/4W |
| R7314 | 401 012 8006 | CARBON 100K JA 1/4W |
| CŌMPL.TB-1 | | |
| COMPL.NO. | 613 079 4796 | |
| VR851 | 613 080 5928 | VR.ROTARY 100K B |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| Q6102 | 405 015 8308 | TR 2SC2812-L4-TB |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| Q6103 | 405 004 3901 | TR 2SA608-E-NP |
| OR | 405 004 4502 | TR 2SA608-F-NP |
| Q6104 | 405 015 8308 | TR 2SC2812-L4-TB |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| Q6141 | 405 015 9909 | TR 2SC2814-F5-TB |
| Q6142 | 405 015 8308 | TR 2SC2812-L4-TB |
| OR | 405 015 8407 | TR 2SC2812-L5-TB |
| R6107 | 401 037 5608 | MT-GLAZE 10K JA 1/10W |
| R6108 | 401 038 0701 | MT-GLAZE 2.2K JA 1/10W |
| R6109 | 401 038 5409 | MT-GLAZE 390K JA 1/10W |
| R6110 | 401 038 3603 | MT-GLAZE 3.3K JA 1/10W |
| R6111 | 401 038 3702 | MT-GLAZE 33K JA 1/10W |
| R6112 | 401 038 5409 | MT-GLAZE 390K JA 1/10W |
| R6113 | 401 038 7502 | MT-GLAZE 56 JA 1/10W |
| R6114 | 401 037 5608 | MT-GLAZE 10K JA 1/10W |
| R6115 | 401 038 7601 | MT-GLAZE 560 JA 1/10W |
| R6116 | 401 037 7800 | MT-GLAZE 150 JA 1/10W |
| R6118 | 401 038 6307 | MT-GLAZE 470 JA 1/10W |
| R6119 | 401 037 5400 | MT-GLAZE 1K JA 1/10W |
| R6120 | 401 038 9001 | MT-GLAZE 680 JA 1/10W |
| R6121 | 401 038 8905 | MT-GLAZE 68 JA 1/10W |
| R6122 | 401 038 3702 | MT-GLAZE 33K JA 1/10W |
| R6123 | 401 038 7809 | MT-GLAZE 56K JA 1/10W |
| R6124 | 401 038 3603 | MT-GLAZE 3.3K JA 1/10W |
| R6125 | 401 038 0701 | MT-GLAZE 2.2K JA 1/10W |
| R6126 | 401 037 5608 | MT-GLAZE 10K JA 1/10W |
| R6127 | 401 038 0701 | MT-GLAZE 2.2K JA 1/10W |
| R6128 | 401 037 5400 | MT-GLAZE 1K JA 1/10W |
| R6129 | 401 038 9209 | MT-GLAZE 6.8K JA 1/10W |
| R6130 | 401 038 7809 | MT-GLAZE 56K JA 1/10W |
| R6131 | 401 024 7004 | CARBON 1K JA 1/6W |
| R6132 | 402 004 1609 | FUSIBLE RES 39 JA 1/4W |
| R6134 | 401 037 5202 | MT-GLAZE 100 JA 1/10W |
| R6141 | 401 037 7909 | MT-GLAZE 1.5K JA 1/10W |
| R6142 | 401 037 5707 | MT-GLAZE 100K JA 1/10W |
| R6143 | 401 037 5707 | MT-GLAZE 100K JA 1/10W |
| R6144 | 401 037 7909 | MT-GLAZE 1.5K JA 1/10W |
| R6145 | 401 038 9209 | MT-GLAZE 6.8K JA 1/10W |
| R6146 | 401 038 3603 | MT-GLAZE 3.3K JA 1/10W |
| R6147 | 401 026 3905 | CARBON 330 JA 1/6W |
| R6148 | 401 037 5400 | MT-GLAZE 1K JA 1/10W |
| R6149 | 401 037 5202 | MT-GLAZE 100 JA 1/10W |
| R6153 | 401 038 2002 | MT-GLAZE 270 JA 1/10W |
| T6101 | 613 016 0744 | IFT |
| T6102 | 613 016 0638 | IFT |
| VR611 | 613 001 9400 | SEMI VR |
| OR | 613 001 9011 | SEMI VR |
| X6101 | 421 001 6202 | SAW F F570M |
| X6102 | 613 082 9399 | FILTER |
| X6103 | 613 082 9382 | FILTER |
| X6104 | 613 091 0875 | FILTER |
| X6105 | 613 091 0868 | FILTER |
| X6106 | 613 091 0868 | FILTER |
| X6107 | 613 092 2212 | DISCR.CERAMIC |
| X6108 | 613 082 9429 | FILTER |
| X6141 | 613 002 8570 | CRYSTAL |
| CŌMPL,TM-1 | | |
| COMPL.NO. | 613 090 4973 | |
| A7101 | 613 084 9793 | VFD |
| C7101 | 403 033 2605 | CERAMIC 8.2P K 50V |
| C7102 | 403 017 9705 | CERAMIC 22P J 50V |
| C7103 | 403 017 9705 | CERAMIC 22P J 50V |
| C7104 | 403 121 9509 | CERAMIC 0.1U Z 50V |
| C7105 | 403 042 8407 | ELECT 22U M 16V |
| C7106 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C7107 | 403 001 1906 | CERAMIC 0.01U M 16V |
| C7108 | 403 048 7107 | ELECT 0.47U M 50V |
| C7109 | 403 121 9509 | CERAMIC 0.1U Z 50V |
| C7110 | 403 069 0309 | CERAMIC 1000P J 50V |
| C7111 | 403 121 9509 | CERAMIC 0.1U Z 50V |
| C7112 | 403 001 1906 | CERAMIC 0.01U M 16V |
| CT711 | 613 002 6576 | TRIMMER 20P N450 |
| OR | 613 002 6583 | TRIMMER 20P N750 |
| D7101 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7102 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7103 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7104 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7105 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7107 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7108 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7109 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7110 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7122 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| D7127 | 407 007 9904 | DIODE GMA01-BT |
| OR | 407 012 4406 | DIODE 1SS133-T-77 |
| IC711 | 409 173 7401 | IC M50957-130SP |
| IC712 | 409 032 3308 | IC MN1280-L |
| Q7101 | 405 012 8400 | TR 2SC2021-TL2-Q |
| R7101 | 401 012 9201 | CARBON 1M JA 1/4W |
| R7102 | 401 012 9904 | CARBON 10M JA 1/4W |
| R7103 | 401 018 5702 | CARBON 330K JA 1/4W |
| R7104 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7106 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7108 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7110 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7113 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7116 | 401 016 4707 | CARBON 22K JA 1/4W |
| R7117 | 401 012 6903 | CARBON 10K JA 1/4W |
| R7118 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7119 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7120 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7122 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7123 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7124 | 401 018 4804 | CARBON 33K JA 1/4W |
| R7125 | 401 012 5609 | CARBON 1K JA 1/4W |
| R7131 | 401 012 8006 | CARBON 100K JA 1/4W |
| R7164 | 401 020 2805 | CARBON 47K JA 1/4W |
| R7165 | 401 016 4707 | CARBON 22K JA 1/4W |
| R7166 | 401 016 4707 | CARBON 22K JA 1/4W |
| RB711 | 613 017 2877 | RESISTOR PACK 10K X6 J |
| OR | 613 079 5892 | R-NETWORK.10KX6 |
| RB712 | 613 079 5878 | R-NETWORK.10KX4 |
| OR | 613 017 2853 | RESISTOR PACK 10K X4 J |

| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| REMŌCŌN | | |
| COMPL.NO. | 613 084 3210 | |
| 1 | 613 040 5180 | SIGN WINDOW |
| 2 | 613 095 9638 | ASSY.CABINET.TOP |
| 3 | 613 084 7171 | BUTTON |
| 4 | 613 080 0022 | COMPL.RM-1 |
| 5 | 613 040 0468 | BOTTOM LID |
| 6 | 411 101 7308 | SCR S-TPG FLT 2.6X10 |
| 7 | 613 040 1618 | BATTERY LID |
| 8 | 613 052 5321 | TERMINAL |



| LOCATION | PARTS NO. | DESCRIPTION |
|---|---|---|
| CŌMPL,RH-1 | | |
| COMPL.NO. | 613 080 0022 | |
| | 613 052 5338 | TERMINAL.+ |
| | 613 052 5345 | TERMINAL.- |
| C1 | 403 009 3100 | CERAMIC 100P J 50V |
| C2 | 403 009 3100 | CERAMIC 100P J 50V |
| C3 | 403 039 2104 | ELECT 47U M 6.3V |
| D1 | 407 007 9904 | DIODE GMA01 |
| OR | 407 012 4406 | DIODE 1SS133 |
| D2 | 407 007 9904 | DIODE GMA01 |
| OR | 407 012 4406 | DIODE 1SS133 |
| D3 | 407 007 9904 | DIODE GMA01 |
| OR | 407 012 4406 | DIODE 1SS133 |
| IC1 | 409 073 6207 | IC UPD6122G-001 |
| LED1 | 407 078 3207 | LED SLR938C |
| Q1 | 405 066 7305 | TR 2SC4040-R |
| OR | 405 015 3006 | TR 2SC2673-R |
| R1 | 401 012 1007 | CARBON 1.5 JA 1/4W |
| R2 | 401 012 4404 | CARBON 100 JA 1/4W |
| X1 | 613 016 6913 | CERAMIC RESONATOR |
| OR | 613 016 6920 | CERAMIC RESONATOR |

# PRODUCTION CHANGE NOTICE

**FISHER**

Please add this notice to the Service Manuals listed below.

Category : VIDEO CASSETTE RECORDER
Date:Nov.22.1989

Model : FVH-P200DK
Destination : East Europe
Effective from : Serial NO.All
REF:WM-530226
Issue Number: 2

The following changes have been made in the products listed above model.

NOTE:Interchangeability
Key: 1 = Old part to New unit.
2 = New part to Old unit.

| Page & Section | Key No. | | Part No. | Description | Q'ty | Interchange-ability |
|---|---|---|---|---|---|---|
| 1 Page ACCESSORIES | | Old | 613 090 3549 | INSTRUCTION MANUAL | | 1 Yes |
| | | New | 613 090 3549<br>613 105 5063 | INSTRUCTION MANUAL<br>INSTRUCTION MANUAL,Hungarian | | 2 Yes |
| | | Old | | | | |
| | | New | | | | |
| | | Old | | | | |
| | | New | | | | |

Reason of change:Hungarian Add

SANYO Electric Co.,Ltd

DP1/EEF 600
Printed in Japan
Reference No.WM-53362N

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vaifi,

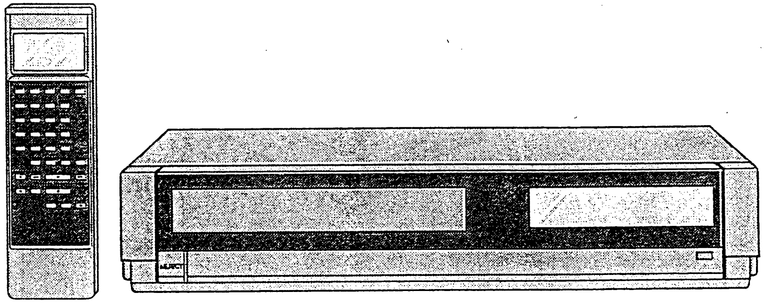
SERVICE MANUAL

**FISHER**

# FVH-P210 series

VIDEO
CASSETTE RECORDER

VHS HQ
PAL



FVH-P210KV

## TABLE OF CONTENTS

Page

1. CIRCUIT BOARD LOCATIONS
   - 1-1. MAIN BOARDS ........ 1
   - 1-2. TEST POINT FOR TAPE PATH ADJUSTMENT ........ 1
2. ELECTRICAL ADJUSTMENT
   - 2-1. PREPARATION ........ 2
   - 2-2. SERVO CIRCUIT ADJUSTMENT ........ 2
   - 2-3. VIDEO CIRCUIT ADJUSTMENT ........ 4
   - 2-4. AUDIO CIRCUIT ADJUSTMENT ........ 7
   - 2-5. TUNER IF CIRCUIT ADJUSTMENT ........ 7

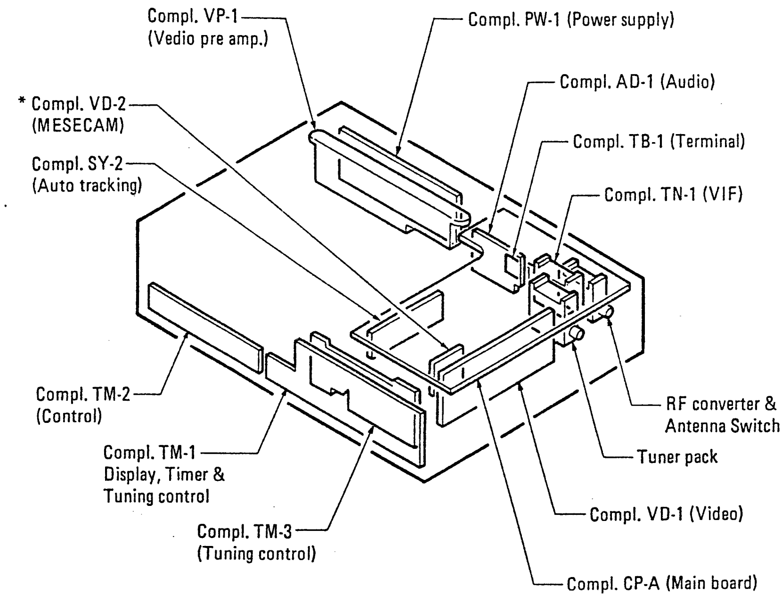
DP2/G-F, EXF, SPF, HKF

REFERENCE No. WM-530190

# 1. CIRCUIT BOARD LOCATIONS

## 1-1. MAIN BOARDS

Compl.= Complete


Compl. VP-1
(Vedio pre amp.)
Compl. PW-1 (Power supply)
Compl. AD-1 (Audio)
* Compl. VD-2
(MESECAM)
Compl. TB-1 (Terminal)
Compl. SY-2
(Auto tracking)
Compl. TN-1 (VIF)
Compl. TM-2
(Control)
RF converter &
Antenna Switch
Compl. TM-1
Display, Timer &
Tuning control
Tuner pack
Compl. VD-1 (Video)
Compl. TM-3
(Tuning control)
Compl. CP-A (Main board)

* This information apply to only equipped with the MESECAM model.

Fig. 1-1

## 1-2. TEST POINT FOR TAPE PATH ADJUSTMENT

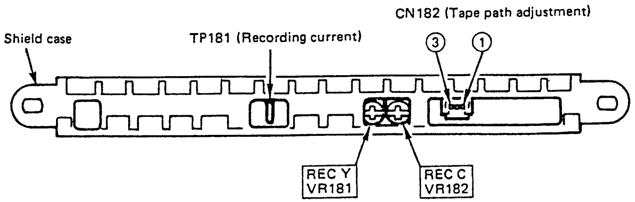

CN182 (Tape path adjustment)
Shield case
TP181 (Recording current)
③
①
REC Y
VR181
REC C
VR182

Fig. 1-2 Compl. VP-1

# 2. ELECTRICAL ADJUSTMENT

## 2-1. PREPARATION

### 2-1-1. EQUIPMENT

- Colour TV monitor
- PAL Colour-bar generator (with RF and LINE OUTPUT)
- Audio frequency oscillator
- Attenuator
- Oscilloscope (dual trace; frequency response: 10MHz or more; probe: 10:1)
- Frequency counter (countable to 10MHz or higher)
- Digital voltmeter
- Alignment cassette (VHJ-0008) Colour bar 1KHz
- Alignment cassette (VHJ-0009) Monoscope 6KHz
- Alignment cassette (VHJ-0051) Check for D.O.C.
- Alignment cassette (VHJ-0023) PAL Monoscope 6KHz, PAL Colour-bar 1KHz, SECAM Colour-bar 1KHz, PAL RF Sweep MESECAM Colour-bar 1KHz, NTSC Colour-bar 1KHz.
- AC voltmeter
- In/output probes

### 2-1-2. SET-UP

Because the RF input signal is used for circuit adjustments, connect the colour-bar generator to the ANT IN terminal of the VCR. The RF input signal is processed by the tuner and IF circuit. It is important that the video output signal of the IF circuit satisfies the items shown in Fig. 2-1. Connect the oscilloscope to the VIDEO OUTPUT terminal of the video circuit, and then check the video output signal.

- The amplitude of the sync signal should be approximately 0.3 Vp-p.
- The amplitude of the video signal should be approximately 0.7 Vp-p.
- While observing the oscilloscope or TV screen, make fine-tuning adjustments so that the colour burst amplitude is approximately 0.3 Vp-p.
- Check to be sure that there is no spike noise in the sync part of the horizontal sync signal.

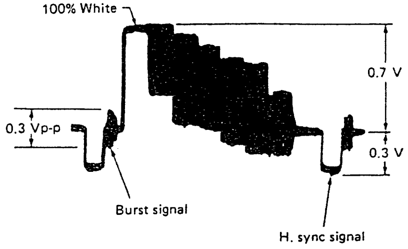
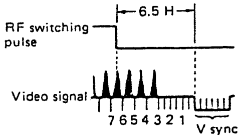


Fig. 2-1

## 2-2. SERVO CIRCUIT ADJUSTMENT ... Compl. CP-A

NOTE (1): These adjustments should be carried out upon completion of the tape transport adjustments.
(2): If the tape transport adjustments are carried out after these adjustments, follow the procedures again in CH-1, CH-2 SWITCHING POSITIONS.

| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 1 | CH-1, CH-2 SWITCHING POSITION | Alignment cassette (VHJ-0009 or VHJ-0023) | PLAY | TP161<br>or<br>CN161 ⑲<br>CN359 ①<br>(trigger) | VR351 |  <br>1. Set the tracking control to the center position (on the display "T – : – ").<br>2. Adjust VR351 so that the phase of the leading edge of the vertical sync signal is delayed 6.5 ± 0.5 H from the fall of the RF switching pulse waveform. |

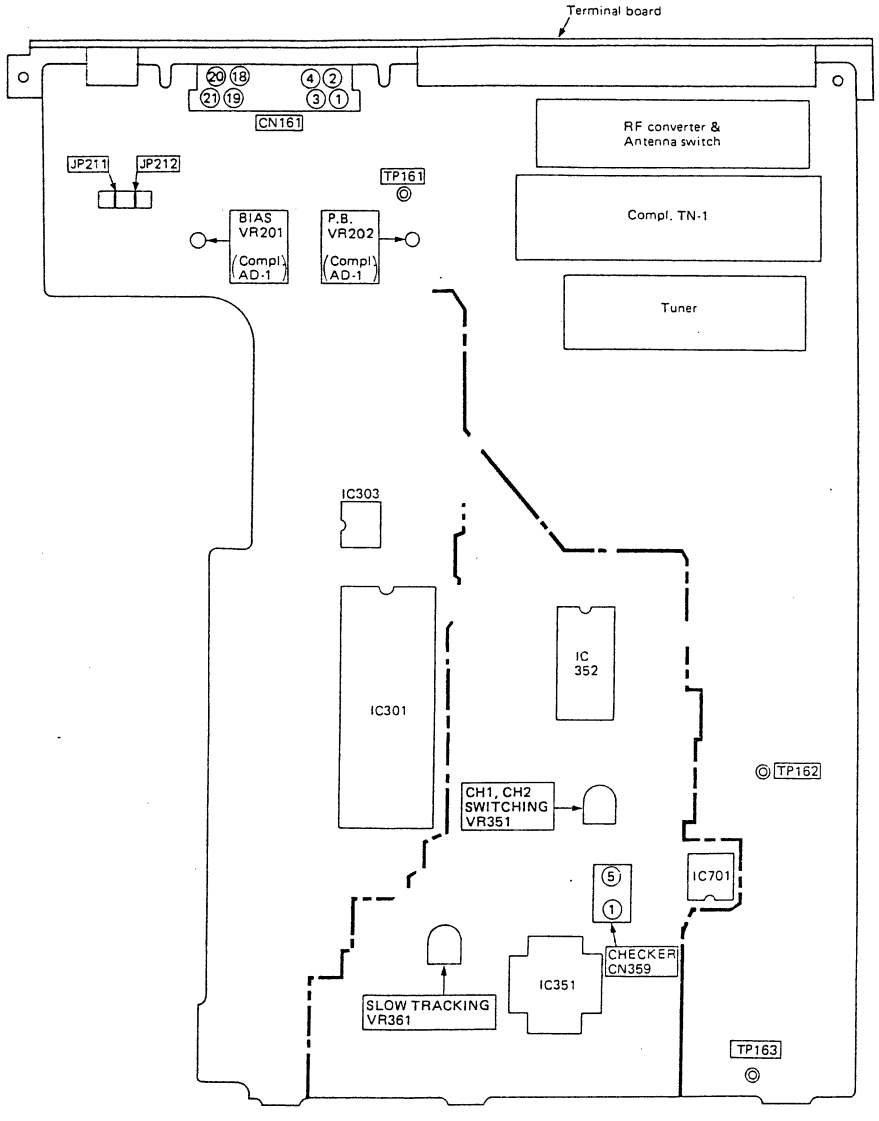
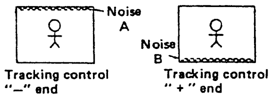

Terminal board
⑳ ⑱
④ ②
㉑ ⑲
③ ①
CN161
JP211
JP212
TP161
BIAS
VR201
(Compl. AD-1)
P.B.
VR202
(Compl. AD-1)
RF converter & Antenna switch
Compl. TN-1
Tuner
IC303
IC301
IC 352
CH1, CH2 SWITCHING VR351
TP162
IC701
⑤
①
CHECKER CN359
IC351
SLOW TRACKING VR361
TP163

Fig. 2-2-1 Compl. CP-A (Foil side view)

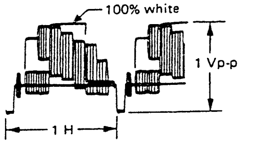
| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 2 | STILL V-LOCK | Colour bar from Colour bar generator | REC<br>⬇<br>PLAY<br>⬇<br>STILL | TV screen | VR851 (Compl. TB-1) | 1. Playback the recorded part, and put the VCR in the STILL mode.<br>2. Adjust VR851 so that the V jitter (very fine movement of the vertical sync) is minimized. |
| 3 | SLOW TRACKING | Colour bar from Colour bar generator | REC<br>⬇<br>PLAY<br>⬇<br>SLOW | TV screen | VR361 |   Noise A<br>Noise B<br>Tracking control "–" end<br>Tracking control "+" end<br>1. Put the VCR in the REC mode and record at the middle of the cassette tape.<br>2. Playback the recorded part, and VCR in the SLOW mode by remote control unit.<br>3. Set the tracking control to the center position (on the display "T –:– ").<br>4. Turn VR361, and move the noise out of the TV screen, while watching to the screen.<br>5. The noise position at which noise begins to appear at the upper edge of the TV screen is A, when the tracking control is turned to the "–" end.<br>6. The noise position at which noise begins to appear at the lower edge of the TV screen is B, when the tracking control is turned to the "+" end.<br>7. Reasjust VR361 so that the same level of noise A and noise B can be obtained. |

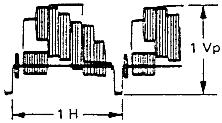
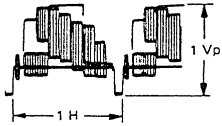
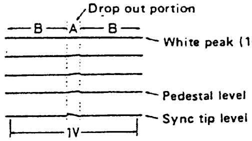
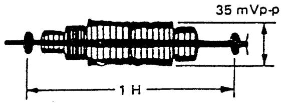
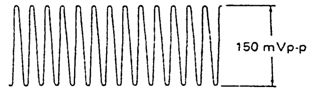
## 2-3. VIDEO CIRCUIT ADJUSTMENT... Compl. VD-1 and Compl. VP-1

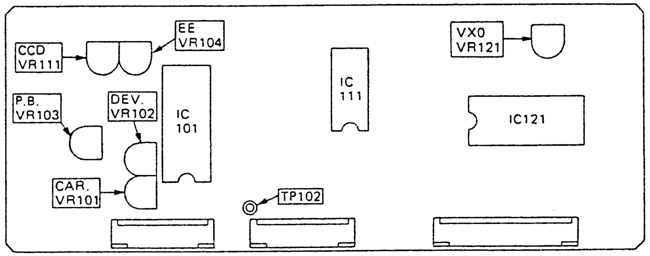
NOTE (1): When adjusting No. 1, No. 3 and No. 4 terminate VIDEO OUTPUT or terminal CN161 pin 19 (Compl. CP-A) at 75 ohms.

(2): To make this adjustment, alternately make the adjustments described in No. 2 and No. 3 below. Repeat this procedure until both adjustment values are satisfied.

(3): 'No-signal REC mode' is not to supply any signal to VIDEO INPUT terminal or CN161 pin 20 (Compl. CP-A).

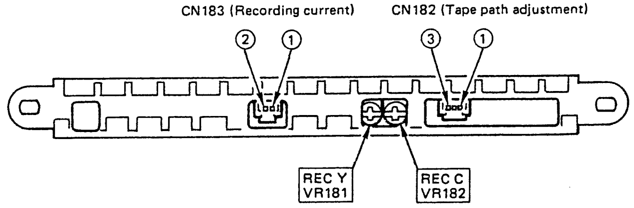
| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 1 | E-E LEVEL<br>NOTE(1) | Colour bar from PAL Colour bar generator | E-E | TP161 or CN161 ⑲ (Compl. CP-A) | VR104 |   100% white<br>1 Vp-p<br>1 H<br>Adjust VR104 so that the level is 1.00 ± 0.05 Vp-p. |

| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 2 | CARRIER SET<br>NOTE(2),(3) | No-signal | REC | TP102 (Compl. VD-1) or TP162 (Compl. CP-A) | VR101 | 1. Press the TU/AV button on the remote control unit to the "AV" position and put the VCR in the no-signal mode.<br>2. Adjust VR101 so that the frequency is 3.80 ± 0.05 MHz. |
| 3 | DEVIATION<br>NOTE(1), (2) | Colour bar (includes 100% white peak) from PAL Colour bar generator | REC (Adjustment)<br>↓<br>PLAY (Check) | TP161 or CN161 ⑲ (Compl. CP-A) | VR102 |  <br>1. Playback the recorded part, and check that the level is 1.00 ± 0.05 Vp-p.<br>2. If the level is not 1.00 ± 0.05 Vp-p, adjust VR102, record and playback it until the value is satisfied. |
| 4 | PLAYBACK LEVEL<br>NOTE(1) | Alignment cassette (VHJ-0008 or VHJ-0023) | PLAY (Colour bar) | TP161 or CN161 ⑲ (Compl. CP-A) | VR103 |  <br>Adjust VR103 so that the level is 1.00 ± 0.05 Vp-p. |
| 5 | VXO | Brank tape | PLAY | TP163 (Compl. CP-A) | VR121 | Adjust VR121 so that the frequency is 4433619 ± 20 Hz. |
| 6 | CCD LEVEL | Alignment cassette (VHJ-0051) | PLAY | TP161 or CN161 ⑲ (Compl. CP-A) | VR111 |  Drop out portion<br>B<br>A<br>B<br>White peak (100%)<br>Pedestal level<br>Sync tip level<br>1V<br>1. Set the horizontal scale (TIME/DIV) of the oscilloscope to 1 msec./div.<br>2. Adjust VR111 so that the drop out portion "A" of white peak (100%) and other portion "B" is same level. |
| 7 | CHRO-MINANCE SIGNAL RECORDING CURRENT | Colour bar from PAL Colour bar generator | REC | CN183 ② or TP181 (HOT) CN183 ① or shield case (GND) (Compl. VP-1) | VR182 |  <br>1. Turn VR181 all the way to the right, looking from the parts side.<br>2. Adjust VR182 so that the level is 35 ± 2 mVp-p. |
| 8 | LUMINANCE SIGNAL RECORDING CURRENT<br>NOTE(3) | No-signal | REC | CN183 ② or TP181 (HOT) CN183 ① or shield case (GND) (Compl. VP-1) | VR181 |  <br>1. Press the TU/AV button on the remote control unit to "AV" position and put the VCR in the no-signal REC mode.<br>2. Adjust VR181 so that the level is 150 ± 5 mVp-p. |



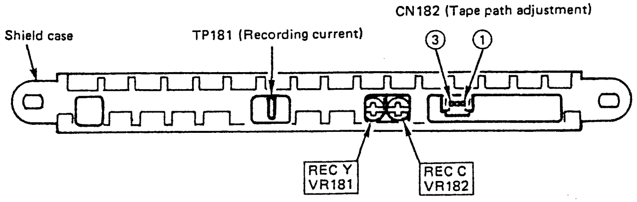
CCD
VR111
EE
VR104
VXO
VR121
P.B.
VR103
DEV.
VR102
IC
101
IC
111
IC121
CAR.
VR101
TP102

Fig. 2-3-1 Compl. VD-1 (Foil side view)



CN183 (Recording current)
CN182 (Tape path adjustment)
②
①
③
①
REC Y
VR181
REC C
VR182

(A): Early product



CN182 (Tape path adjustment)
Shield case
TP181 (Recording current)
③
①
REC Y
VR181
REC C
VR182

(B): Modified in the course of production

Fig. 2-3-2 Compl. VP-1

### 2-4. AUDIO CIRCUIT ADJUSTMENT... Compl. AD-1

NOTE (1): The VR201 and VR202 (on the Compl. AD-1) accessible from the foil side of Compl. CP-A. (see Fig. 2-2-1)
NOTE (2): 'No-signal record mode' is not to supply any signal to AUDIO INPUT terminal or CN161 ②, ⑥ (CP-A).
NOTE (3): Item No. 2 apply to the model that equipped with 21 pin SCART on the rear terminal board.
NOTE (4): Item No. 3 apply to the model that equipped with RCA pin jack on the rear terminal board.

| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 1 | BIAS | No-signal | REC | JP212<br>JP211<br>(GND) | VR201 | 1. Press the TU/AV button on the remote control unit to the "AV" position and put the VCR in the no-signal record mode.<br>2. Adjust VR201 so that the level is 24 mV rms. |
| 2 | PLAYBACK OUTPUT LEVEL | Audio signal (1 KHz, −3.8 dBs) from Audio signal generator | REC<br>⬇<br>PLAY | CN161<br>① or ③<br>(Compl. CP-A) | VR202 | Adjust VR202 so that the recorded 1 KHz output level becomes −3.8 dBs in the PLAY mode. |
| 3 | PLAYBACK OUTPUT LEVEL | Audio signal (1 KHz, −20 dBs) from Audio signal generator | REC<br>⬇<br>PLAY | AUDIO OUTPUT terminal | VR202 | Adjust VR202 so that the recorded 1 KHz output level becomes −8 dBs in the PLAY mode. |

### 2-5. TUNER IF CIRCUIT ADJUSTMENT . . . Compl. TN-1

| No. | Item | Input | Mode | Point | Location | Remark |
|---|---|---|---|---|---|---|
| 1 | RF AGC | TV broadcast | E-E | TV screen | VR6101 | 1. Remove the rear terminal board from Compl. CP-A. (see Fig. 2-2-1).<br>2. Turn VR6101 in the direction which causes snow to appear, then in the opposite direction until the snow just disappears. |

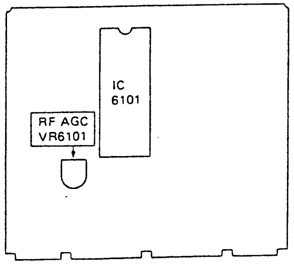


Fig. 2-5 1 Compl. TN-1 (Parts side view)

Printed in Japan
Jan./'89/3100 NS

# BLOCK DIAGRAMS, CIRCUIT DIAGRAMS & PRINTED CIRCUIT BOARDS

# FVH-P200DK (East Europe)

## TABLE OF CONTENTS

| | | |
|---|---|---|
| ———— | OVERALL WIRING DIAGRAM | Ⓐ |
| ———— | SERVO CIRCUIT BASIC BLOCK DIAGRAM | |
| ———— | AUDIO CIRCUIT BASIC BLOCK DIAGRAM | Ⓑ |
| ———— | VIDEO CIRCUIT BASIC BLOCK DIAGRAM | |
| COMPL. VD-1 | VIDEO CIRCUIT & P.C.B. | Ⓒ |
| COMPL. VD-2 | VIDEO CIRCUIT & P.C.B. | |
| COMPL. AD-1 | AUDIO CIRCUIT & P.C.B. | |
| COMPL. VP-1 | VIDEO PRE-AMP CIRCUIT & P.C.B. | |
| ———— | WAVEFORM OF VIDEO | |
| COMPL. CP-A | MAIN CIRCUIT | Ⓓ |
| ———— | IC351 (LC7417) DIGITAL SERVO IC. INTER BLOCK DIAGRAM | |
| ———— | WAVEFORM OF SERVO | |
| —— CP-1 | MAIN P.C.B. | Ⓔ |
| —— TB-1 | TERMINAL P.C.B. | |
| ———— | MECHANISM CONNECTION CIRCUIT | |
| ———— | IR REMOTE CONTROL CIRCUIT | |
| ———— | RF CONVERTER CIRCUIT | |
| COMPL. TM-1,2 | DISPLAY, TIMER, TUNING CONTROL, SWITCH CIRCUIT & P.C.B. | Ⓕ |
| COMPL. TM-3 | SYNC SEPA CIRCUIT & P.C.B. | Ⓖ |
| COMPL. PW-1,2 | POWER SUPPLY CIRCUIT & P.C.B. | |
| COMPL. TN-1 | IF CIRCUIT & P.C.B. | Ⓗ |

DP1/EEF 92N

REFERENCE NO. WM-530226

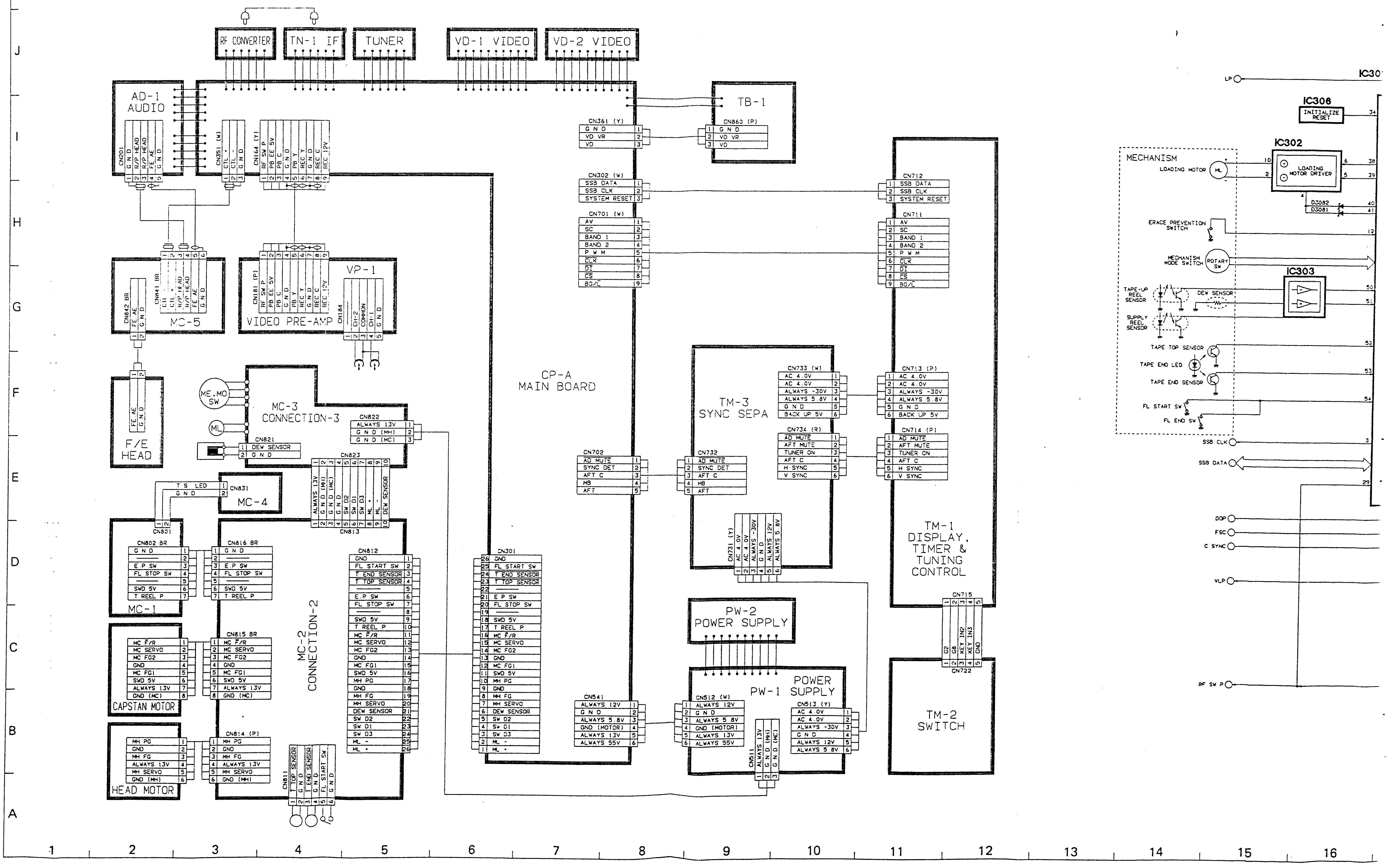
NOTES:

1. All resistance values in "OHMS" unless otherwise noted. (K=1,000 M=1,000,000)
2. All capacitance values in "μfd" unless otherwise noted. p=pico farad
3. All inductance values in "mH" unless otherwise noted. μ=micro henry

## PRODUCT SAFETY NOTICE

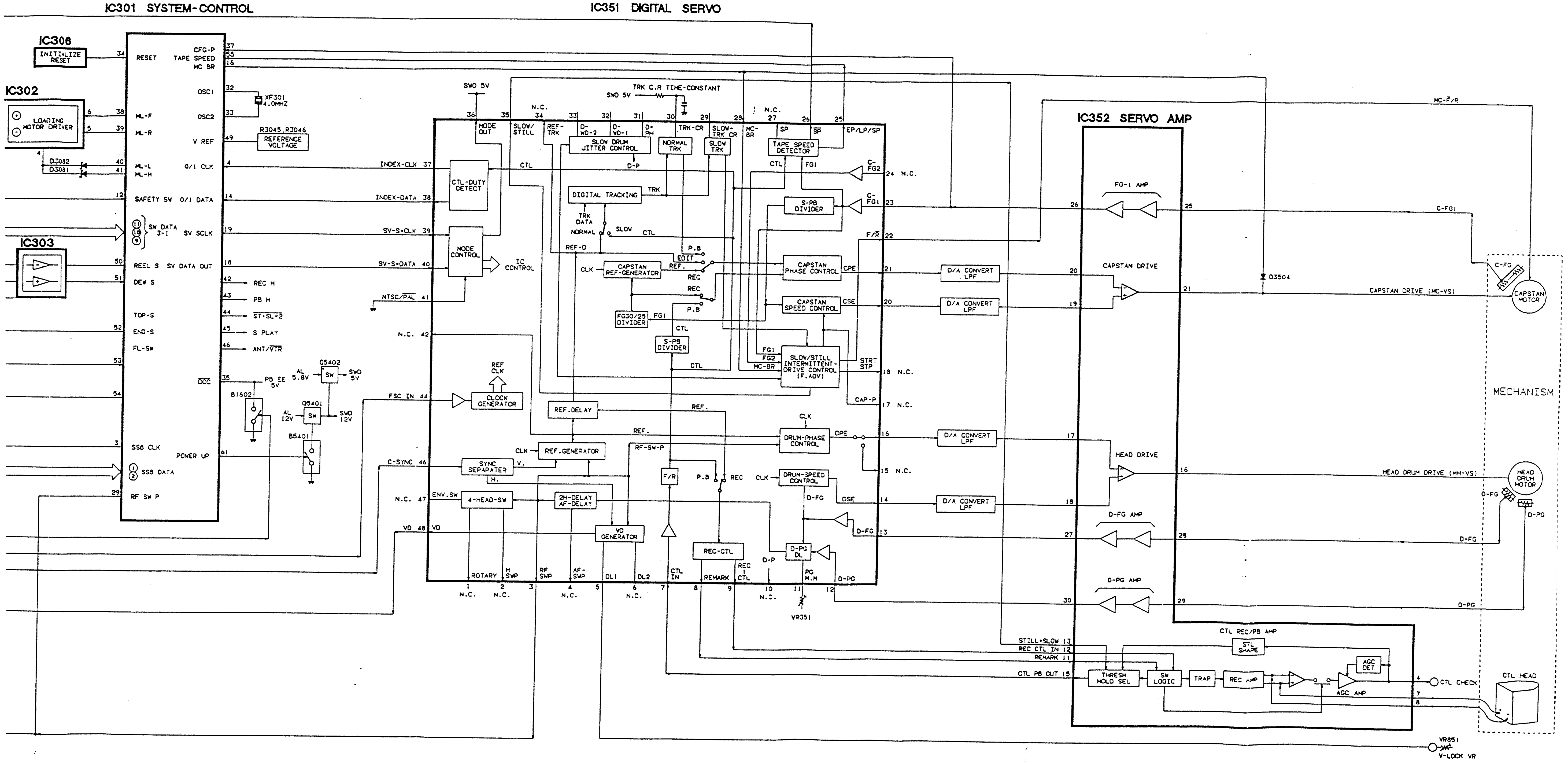
THE COMPONENTS DESIGNATED BY A SYMBOL (⚠) IN THIS SCHEMATIC DIAGRAM DESIGNATES COMPONENTS WHOSE VALUE ARE OF SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. SHOULD ANY COMPONENT DESIGNATED BY A SYMBOL NEED TO BE REPLACED, USE ONLY THE PART DESIGNATED IN THE PARTS LIST. DO NOT DEVIATE FROM THE RESISTANCE, WATTAGE AND VOLTAGE RATINGS SHOWN.

# OVERALL WIRING DIAGRAM



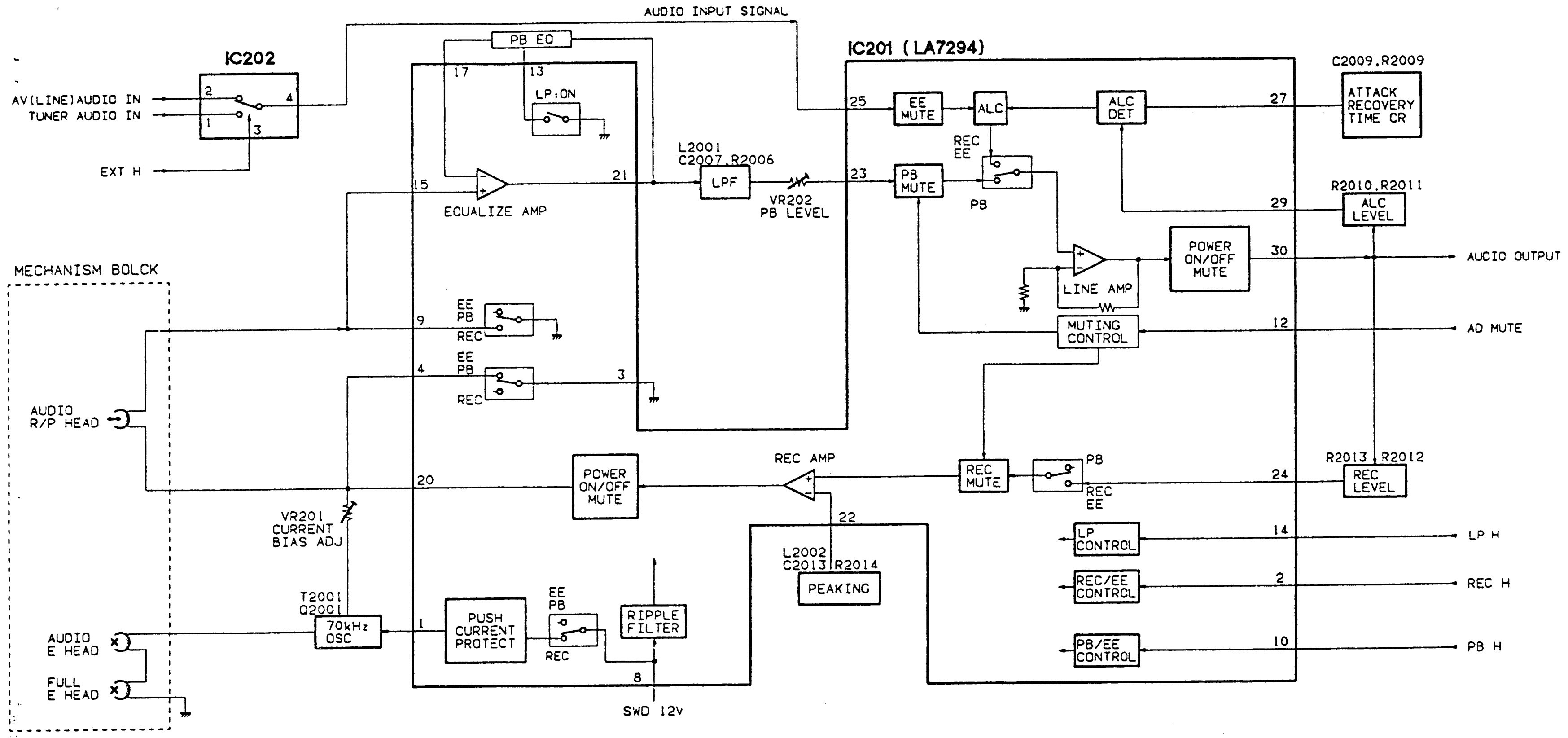
K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
RF CONVERTER
TN-1 IF
TUNER
VD-1 VIDEO
VD-2 VIDEO
AD-1 AUDIO
CN201 GND R/P HEAD R/P HEAD FE AE GND
CN351 (W) CTL + CTL - GND
CN164 (Y) RF SW P PB EE 5V PB C GND PB Y REC Y GND REC C REC 12V
TB-1
CN361 (Y) GND VD VR VD
CN860 (P) GND VD VR VD
CN302 (W) SSB DATA SSB CLK SYSTEM RESET
CN712 SSB DATA SSB CLK SYSTEM RESET
CN701 (W) AV SC BAND 1 BAND 2 PWM CLK DI CS BG/L
CN711 AV SC BAND 1 BAND 2 PWM CLK DI CS BG/L
MC-5
CN841 BR CTL + CTL - R/P HEAD R/P HEAD FE AE GND
CN842 BR FE AE GND
VP-1
VIDEO PRE-AMP
CN181 (P) RF SW P PB EE 5V PB C GND PB Y REC Y GND REC C REC 12V
CN184 CH-2 COMMON CH-1 GND
F/E HEAD
FE AE GND
ME.MO SW
ML
MC-3 CONNECTION-3
CN822 ALWAYS 13V GND (MH) GND (MC)
CN821 DEW SENSOR GND
CN823
CN813 ALWAYS 13V GND (MH) GND (MC) GND SW D2 SW D1 SW D3 ML + ML - DEW SENSOR
CP-A MAIN BOARD
TS LED GND
CN831
MC-4
CN801
MC-1
CN802 BR GND E P SW FL STOP SW SWD 5V T REEL P
CN816 BR GND E.P SW FL STOP SW SWD 5V T REEL P
MC-2 CONNECTION-2
CN812 GND FL START SW T END SENSOR T TOP SENSOR E.P SW FL STOP SW SWD 5V T REEL P MC F/R MC SERVO MC FG2 GND MC FG1 SWD 5V MH PG GND MH FG MH SERVO DEW SENSOR SW D2 SW D1 SW D3 ML - ML +
CN301 GND FL START SW T END SENSOR T TOP SENSOR E P SW FL STOP SW SWD 5V T REEL P MC F/R MC SERVO MC FG2 GND MC FG1 SWD 5V MH PG GND MH FG MH SERVO DEW SENSOR SW D2 SW D1 SW D3 ML - ML +
CAPSTAN MOTOR
MC F/R MC SERVO MC FG2 GND MC FG1 SWD 5V ALWAYS 13V GND (MC)
CN815 BR MC F/R MC SERVO MC FG2 GND MC FG1 SWD 5V ALWAYS 13V GND (MC)
HEAD MOTOR
MH PG GND MH FG ALWAYS 13V MH SERVO GND (MH)
CN814 (P) MH PG GND MH FG ALWAYS 13V MH SERVO GND (MH)
CN811 T TOP SENSOR GND T END SENSOR GND FL START SW GND
TM-3 SYNC SEPA
CN733 (W) AC 4.0V AC 4.0V ALWAYS -30V ALWAYS 5.8V GND BACK UP 5V
CN713 (P) AC 4.0V AC 4.0V ALWAYS -30V ALWAYS 5.8V GND BACK UP 5V
CN734 (R) AD MUTE AFT MUTE TUNER ON AFT C H SYNC V SYNC
CN714 (P) AD MUTE AFT MUTE TUNER ON AFT C H SYNC V SYNC
CN702 AD MUTE SYNC DET AFT C MB AFT
CN732 AD MUTE SYNC DET AFT C MB AFT
CN731 (Y) AC 4.0V AC 4.0V ALWAYS -30V GND ALWAYS 12V ALWAYS 5.8V
TM-1 DISPLAY, TIMER & TUNING CONTROL
CN715
CN722 G2 G8 KEY IN2 KEY IN3 GND
TM-2 SWITCH
PW-2 POWER SUPPLY
PW-1 POWER SUPPLY
CN541 ALWAYS 12V GND ALWAYS 5.8V GND (MOTOR) ALWAYS 13V ALWAYS 55V
CN512 (W) ALWAYS 12V GND ALWAYS 5.8V GND (MOTOR) ALWAYS 13V ALWAYS 55V
CN513 (Y) AC 4.0V AC 4.0V ALWAYS -30V GND ALWAYS 12V ALWAYS 5.8V
CN511 ALWAYS 13V GND (MH) GND (MC)
LP
IC30
IC306 INITIALIZE RESET
IC302 LOADING MOTOR DRIVER
MECHANISM
LOADING MOTOR
ML
D3082
D3081
ERACE PREVENTION SWITCH
MECHANISM MODE SWITCH
ROTARY SW
IC303
TAPE-UP REEL SENSOR
DEW SENSOR
SUPPLY REEL SENSOR
TAPE TOP SENSOR
TAPE END LED
TAPE END SENSOR
FL START SW
FL END SW
SSB CLK
SSB DATA
DOP
FSC
C SYNC
VLP
RF SW P
34 10 2 6 5 38 39 4 40 41 12 50 51 52 53 54 3 29

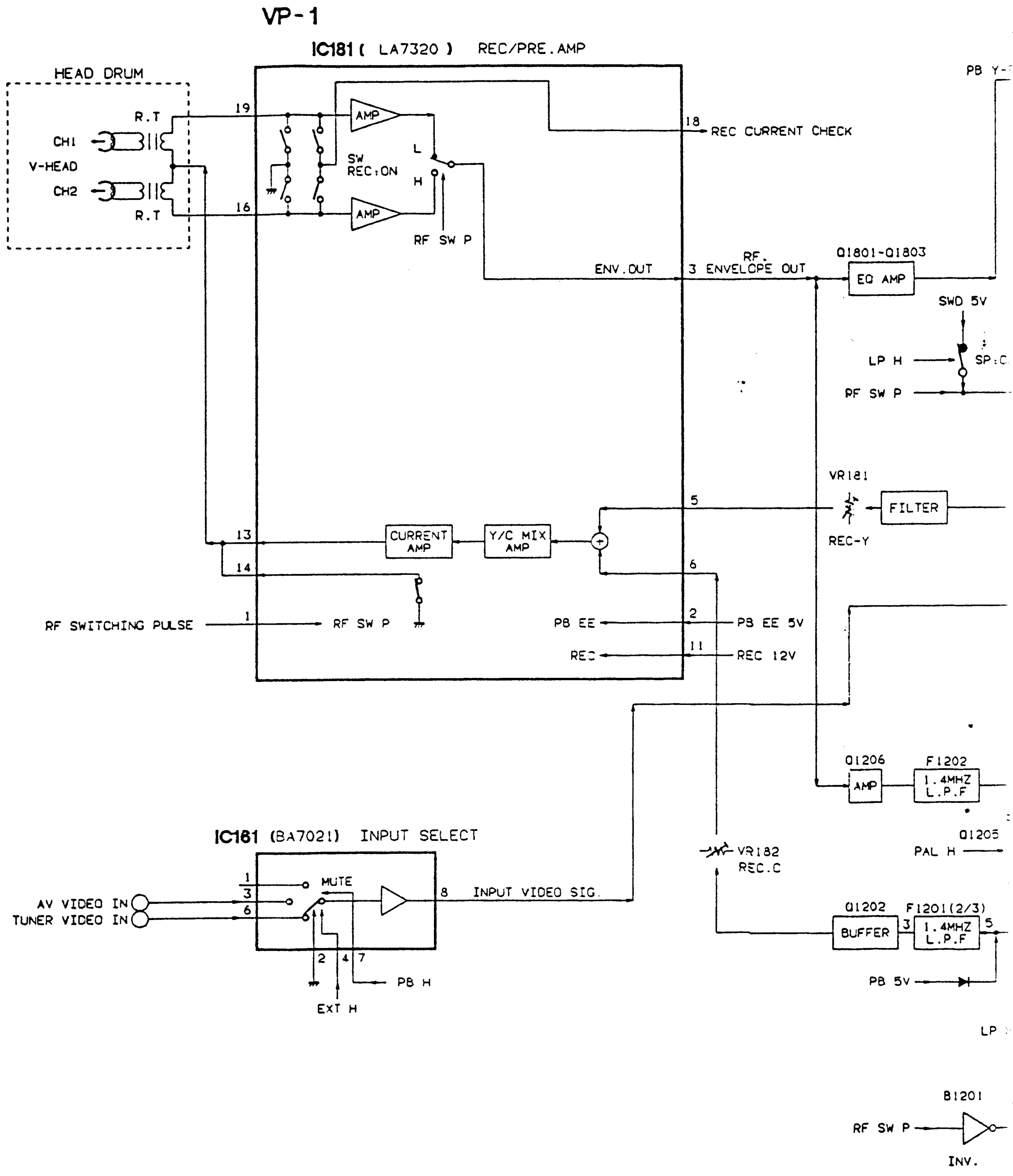
# SERVO CIRCUIT BASIC BLOCK DIAGRAM


IC301 SYSTEM-CONTROL
IC351 DIGITAL SERVO
IC352 SERVO AMP
IC306
INITIALIZE RESET
IC302
LOADING MOTOR DRIVER
IC303
D3082
D3081
RESET
CFG-P
TAPE SPEED
MC BR
OSC1
OSC2
XF301 4.0MHZ
V REF
R3045,R3046 REFERENCE VOLTAGE
ML-F
ML-R
ML-L
ML-H
0/1 CLK
SAFETY SW
0/1 DATA
SW DATA 3-1
SV SCLK
REEL S
SV DATA OUT
DEW S
REC H
PB H
TOP-S
ST·SL÷2
END-S
S PLAY
FL-SW
ANT/VTR
DOC
PB EE 5V
B1602
Q5402
Q5401
AL 5.8V
SWD 5V
AL 12V
SWD 12V
B5401
SSB CLK
POWER UP
SSB DATA
RF SW P
SWD 5V
TRK C.R TIME-CONSTANT
INDEX-CLK 37
INDEX-DATA 38
SV-S-CLK 39
SV-S-DATA 40
NTSC/PAL 41
N.C. 42
FSC IN 44
C-SYNC 46
N.C. 47
VD 48
MODE OUT
SLOW/STILL
REF-TRK
D-WD-2
D-WD-1
D-PH
TRK-CR
SLOW-TRK CR
MC-BR
SP
EP/LP/SP
SLOW DRUM JITTER CONTROL
NORMAL TRK
SLOW TRK
TAPE SPEED DETECTOR
CTL-DUTY DETECT
DIGITAL TRACKING
TRK DATA
NORMAL
SLOW
S-PB DIVIDER
MODE CONTROL
IC CONTROL
REF-D
EDIT
CAPSTAN REF-GENERATOR
CAPSTAN PHASE CONTROL
CAPSTAN SPEED CONTROL
FG30/25 DIVIDER
S-PB DIVIDER
SLOW/STILL INTERMITTENT-DRIVE CONTROL (F.ADV)
STRT STP
CAP-P
C-FG2
C-FG1
F/R
REF CLK
CLOCK GENERATOR
REF.DELAY
REF.GENERATOR
DRUM-PHASE CONTROL
DRUM-SPEED CONTROL
SYNC SEPAPATER
4-HEAD-SW
2H-DELAY AF-DELAY
VD GENERATOR
F/R
REC-CTL
D-PG DL
ROTARY
H SWP
RF SWP
AF-SWP
DL1
DL2
CTL IN
REMARK
REC CTL
D-P
PG M.M
D-PG
VR351
D/A CONVERT LPF
FG-1 AMP
CAPSTAN DRIVE
HEAD DRIVE
D-FG AMP
D-PG AMP
CTL REC/PB AMP
STL SHAPE
STILL+SLOW 13
REC CTL IN 12
REMARK 11
CTL PB OUT 15
THRESH HOLD SEL
SW LOGIC
TRAP
REC AMP
AGC DET
AGC AMP
CTL CHECK
CTL HEAD
MC-F/R
C-FG1
D3504
CAPSTAN DRIVE (MC-VS)
HEAD DRUM DRIVE (MH-VS)
C-FG
CAPSTAN MOTOR
HEAD DRUM MOTOR
D-FG
D-PG
MECHANISM
VR851
V-LOCK VR

Ⓐ
FVH-P200C

## AUDIO CIRCUIT BASIC BLOCK DIAGRAM


AUDIO INPUT SIGNAL
IC202
AV(LINE)AUDIO IN
TUNER AUDIO IN
EXT H
2
1
3
4
PB EQ
17
13
LP:ON
15
21
ECUALIZE AMP
L2001
C2007,R2006
LPF
VR202
PB LEVEL
MECHANISM BOLCK
AUDIO
R/P HEAD
9
EE
PB
REC
4
3
20
POWER
ON/OFF
MUTE
VR201
CURRENT
BIAS ADJ
T2001
Q2001
70kHz
OSC
AUDIO
E HEAD
FULL
E HEAD
1
PUSH
CURRENT
PROTECT
RIPPLE
FILTER
8
SWD 12V
REC AMP
22
L2002
C2013 R2014
PEAKING
IC201 (LA7294)
25
EE
MUTE
ALC
ALC
DET
27
C2009,R2009
ATTACK
RECOVERY
TIME CR
23
PB
MUTE
REC
EE
PB
29
R2010,R2011
ALC
LEVEL
LINE AMP
POWER
ON/OFF
MUTE
30
AUDIO OUTPUT
MUTING
CONTROL
12
AD MUTE
REC
MUTE
PB
REC
EE
24
R2013
R2012
REC
LEVEL
LP
CONTROL
14
LP H
REC/EE
CONTROL
2
REC H
PB/EE
CONTROL
10
PB H

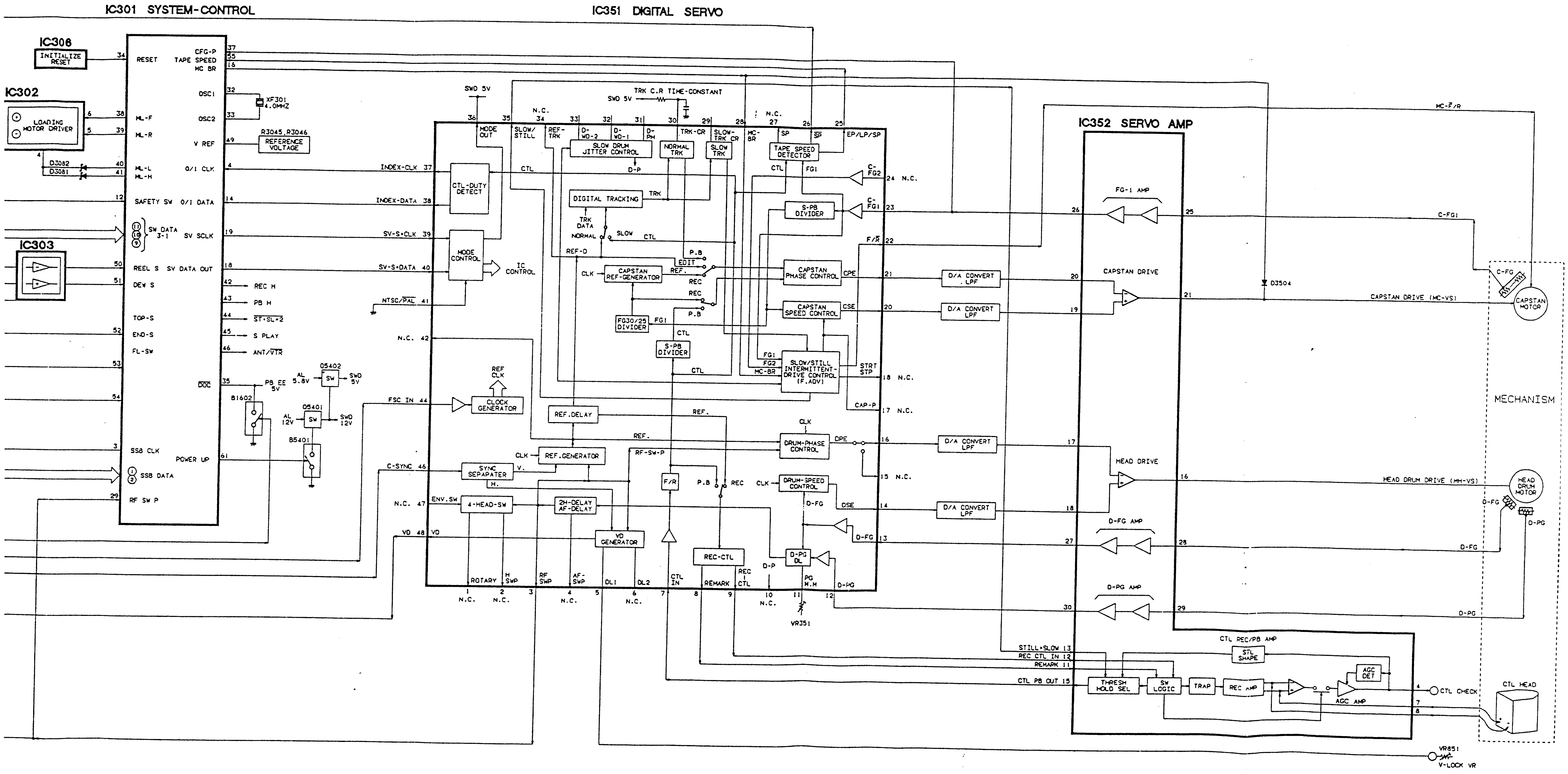

VP-1
IC181 ( LA7320 ) REC/PRE.AMP
HEAD DRUM
R.T
CH1
V-HEAD
CH2
R.T
19
16
AMP
AMP
SW
REC:ON
L
H
RF SW P
18
REC CURRENT CHECK
PB Y-
ENV.OUT
RF.
3 ENVELOPE OUT
Q1801-Q1803
EQ AMP
SWD 5V
LP H
SP:C
RF SW P
VR181
FILTER
REC-Y
5
13
14
CURRENT
AMP
Y/C MIX
AMP
6
RF SWITCHING PULSE
1
RF SW P
PB EE
2
PB EE 5V
REC
11
REC 12V
Q1206
AMP
F1202
1.4MHZ
L.P.F
Q1205
PAL H
IC161 (BA7021) INPUT SELECT
1
3
6
MUTE
8
INPUT VIDEO SIG.
AV VIDEO IN
TUNER VIDEO IN
2
4
7
PB H
EXT H
VR182
REC.C
Q1202
BUFFER
F1201(2/3)
3
1.4MHZ
L.P.F
5
PB 5V
LP
B1201
RF SW P
INV.
DDR

Ⓑ
-I-P200DK

K
J
I
H
G
F
E
D
C
B
A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

# SERVO CIRCUIT BASIC BLOCK DIAGRAM


IC301 SYSTEM-CONTROL
IC351 DIGITAL SERVO
IC352 SERVO AMP
IC306
INITIALIZE RESET
IC302
LOADING MOTOR DRIVER
IC303
D3082
D3081
RESET
CFG-P
TAPE SPEED
MC BR
OSC1
OSC2
XF301 4.0MHZ
ML-F
ML-R
V REF
R3045, R3046 REFERENCE VOLTAGE
ML-L
ML-H
0/1 CLK
SAFETY SW
0/1 DATA
SW DATA 3-1
SV SCLK
REEL S
SV DATA OUT
DEW S
REC H
PB H
TOP-S
ST·SL·2
END-S
S PLAY
FL-SW
ANT/VTR
DOC
PB EE 5V
B1602
Q5402
SW
AL 5.8V
SWD 5V
Q5401
AL 12V
SWD 12V
B5401
SSB CLK
POWER UP
SSB DATA
RF SW P
INDEX-CLK 37
INDEX-DATA 38
SV-S-CLK 39
SV-S-DATA 40
NTSC/PAL 41
N.C. 42
FSC IN 44
C-SYNC 46
N.C. 47
VD 48
SWD 5V
TRK C.R TIME-CONSTANT
SWD 5V
N.C.
MODE OUT
SLOW/STILL
REF-TRK
D-WD-2
D-WD-1
D-PH
TRK-CR
SLOW-TRK CR
MC-BR
SP
SP
EP/LP/SP
SLOW DRUM JITTER CONTROL
NORMAL TRK
SLOW TRK
TAPE SPEED DETECTOR
CTL-DUTY DETECT
CTL
D-P
CTL
FG1
C-FG2
24 N.C.
C-FG1
DIGITAL TRACKING
TRK
TRK DATA
NORMAL
SLOW
CTL
S-PB DIVIDER
MODE CONTROL
IC CONTROL
REF-D
EDIT
P.B
REF.
REC
CLK
CAPSTAN REF-GENERATOR
CAPSTAN PHASE CONTROL
CPE
CAPSTAN SPEED CONTROL
CSE
FG30/25 DIVIDER
FG1
CTL
S-PB DIVIDER
FG1
FG2
MC-BR
SLOW/STILL INTERMITTENT-DRIVE CONTROL (F.ADV)
STRT STP
18 N.C.
CAP-P
17 N.C.
REF CLK
CLOCK GENERATOR
REF.DELAY
REF.
CLK
DRUM-PHASE CONTROL
DPE
REF.
CLK
REF.GENERATOR
RF-SW-P
15 N.C.
SYNC SEPAPATER
V.
H.
F/R
P.B
REC
CLK
DRUM-SPEED CONTROL
D-FG
DSE
ENV.SW
4-HEAD-SW
2H-DELAY AF-DELAY
VD
VD GENERATOR
REC-CTL
D-P
D-PG DL
D-FG
ROTARY
H SWP
RF SWP
AF-SWP
DL1
DL2
CTL IN
REMARK
REC CTL
PG H.H
D-PG
1 N.C.
2 N.C.
4 N.C.
6 N.C.
10 N.C.
VR351
D/A CONVERT LPF
D/A CONVERT LPF
D/A CONVERT LPF
D/A CONVERT LPF
FG-1 AMP
CAPSTAN DRIVE
HEAD DRIVE
D-FG AMP
D-PG AMP
MC-F/R
C-FG1
D3504
CAPSTAN DRIVE (MC-VS)
HEAD DRUM DRIVE (MH-VS)
D-FG
D-PG
C-FG
CAPSTAN MOTOR
MECHANISM
HEAD DRUM MOTOR
D-FG
D-PG
CTL REC/PB AMP
STL SHAPE
STILL+SLOW 13
REC CTL IN 12
REMARK 11
CTL PB OUT 15
THRESH HOLD SEL
SW LOGIC
TRAP
REC AMP
AGC DET
AGC AMP
CTL CHECK
CTL HEAD
VR851
V-LOCK VR

Ⓐ FVH-P200C

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H-P200DK

E

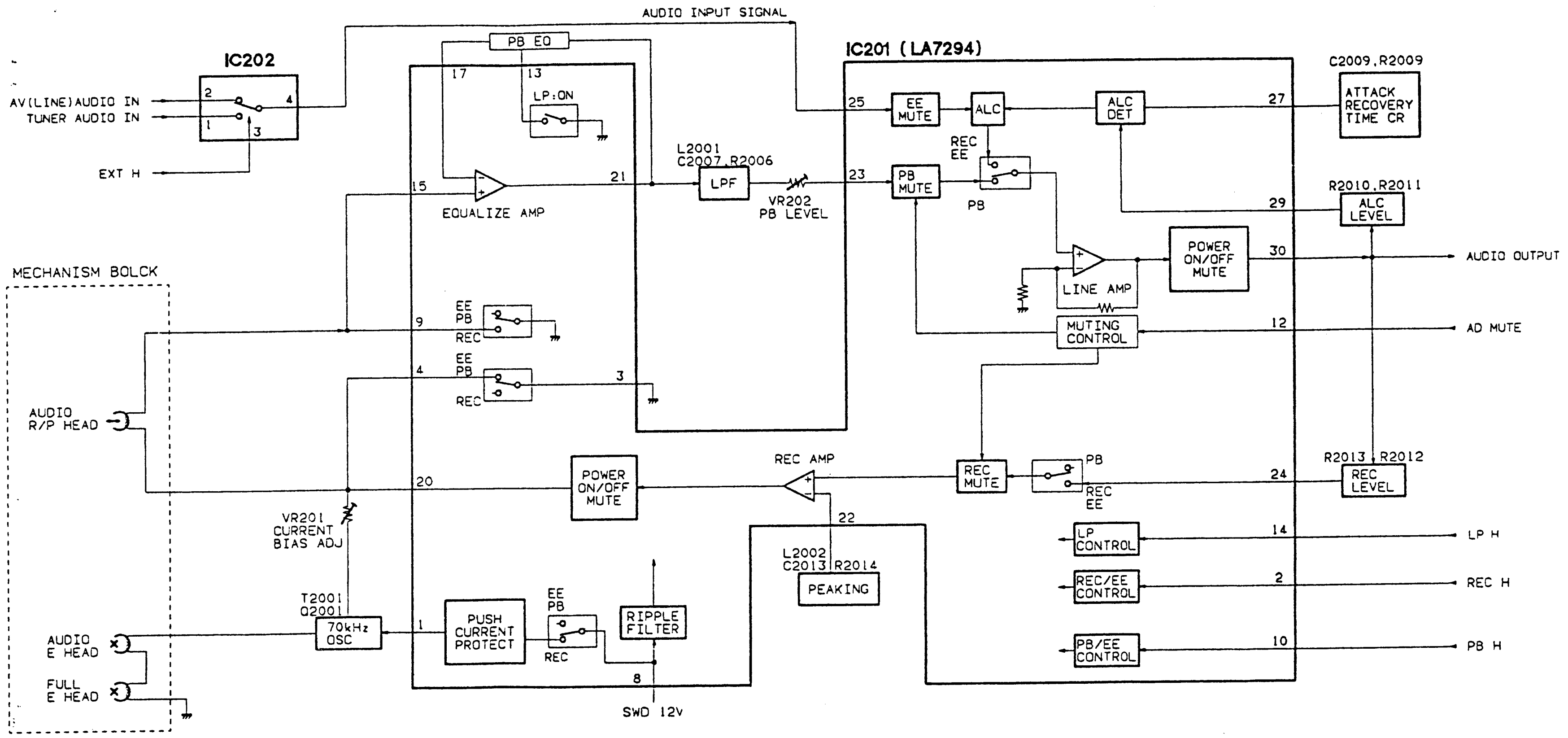
D

C

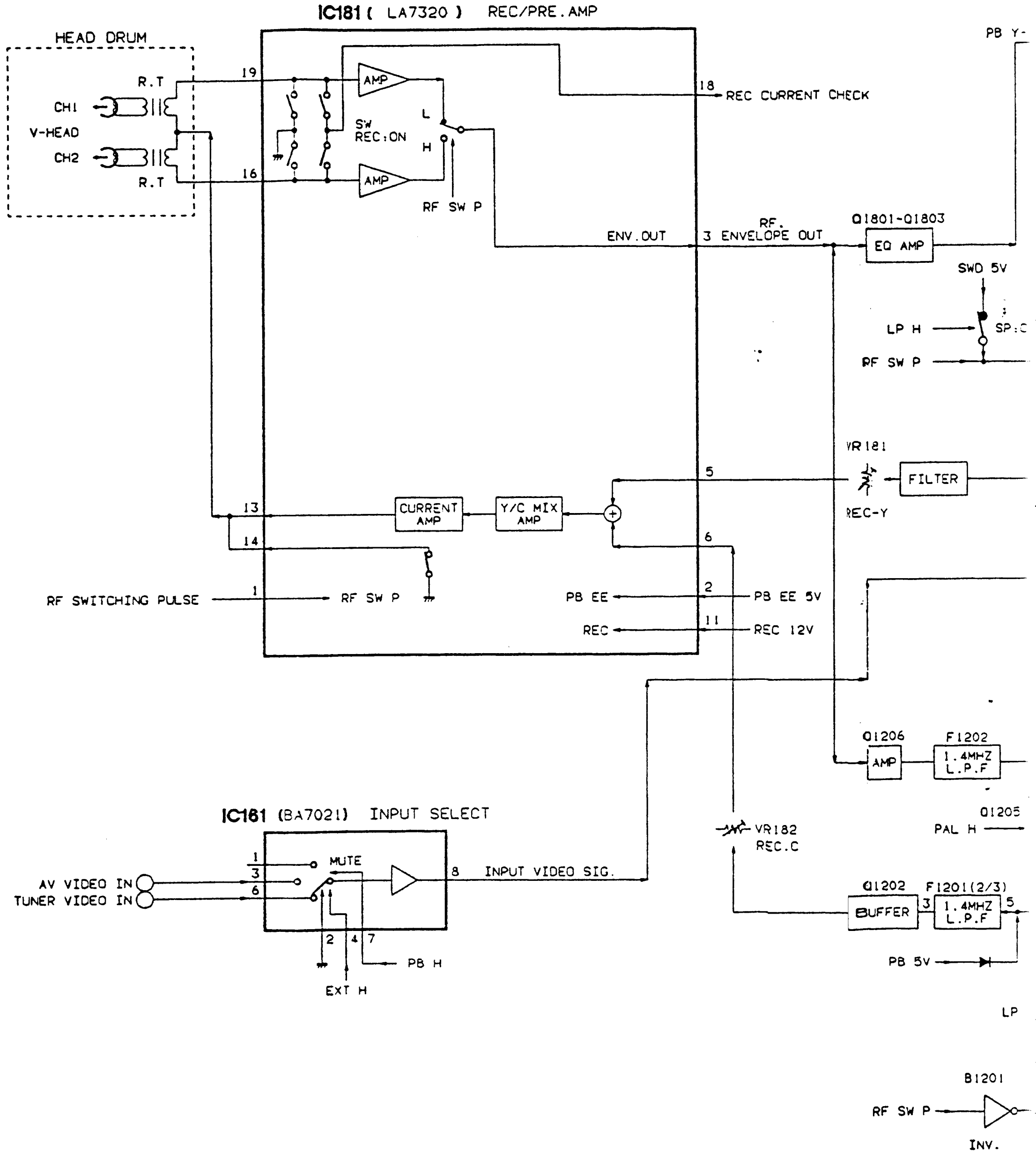
B

A

## AUDIO CIRCUIT BASIC BLOCK DIAGRAM


AUDIO INPUT SIGNAL
IC202
AV(LINE)AUDIO IN
TUNER AUDIO IN
EXT H
PB EQ
LP:ON
EQUALIZE AMP
L2001
C2007,R2006
LPF
VR202
PB LEVEL
IC201 (LA7294)
EE MUTE
ALC
ALC DET
PB MUTE
REC
EE
PB
C2009,R2009
ATTACK RECOVERY TIME CR
R2010,R2011
ALC LEVEL
LINE AMP
POWER ON/OFF MUTE
AUDIO OUTPUT
MUTING CONTROL
AD MUTE
MECHANISM BOLCK
AUDIO R/P HEAD
EE
PB
REC
REC AMP
REC MUTE
R2013
R2012
REC LEVEL
POWER ON/OFF MUTE
VR201
CURRENT
BIAS ADJ
L2002
C2013
R2014
PEAKING
LP CONTROL
LP H
REC/EE CONTROL
REC H
PB/EE CONTROL
PB H
AUDIO E HEAD
FULL E HEAD
T2001
Q2001
70kHz OSC
PUSH CURRENT PROTECT
RIPPLE FILTER
SWD 12V
2
1
3
4
17
13
15
21
25
23
27
29
30
12
9
4
3
20
22
24
14
2
10
1
8

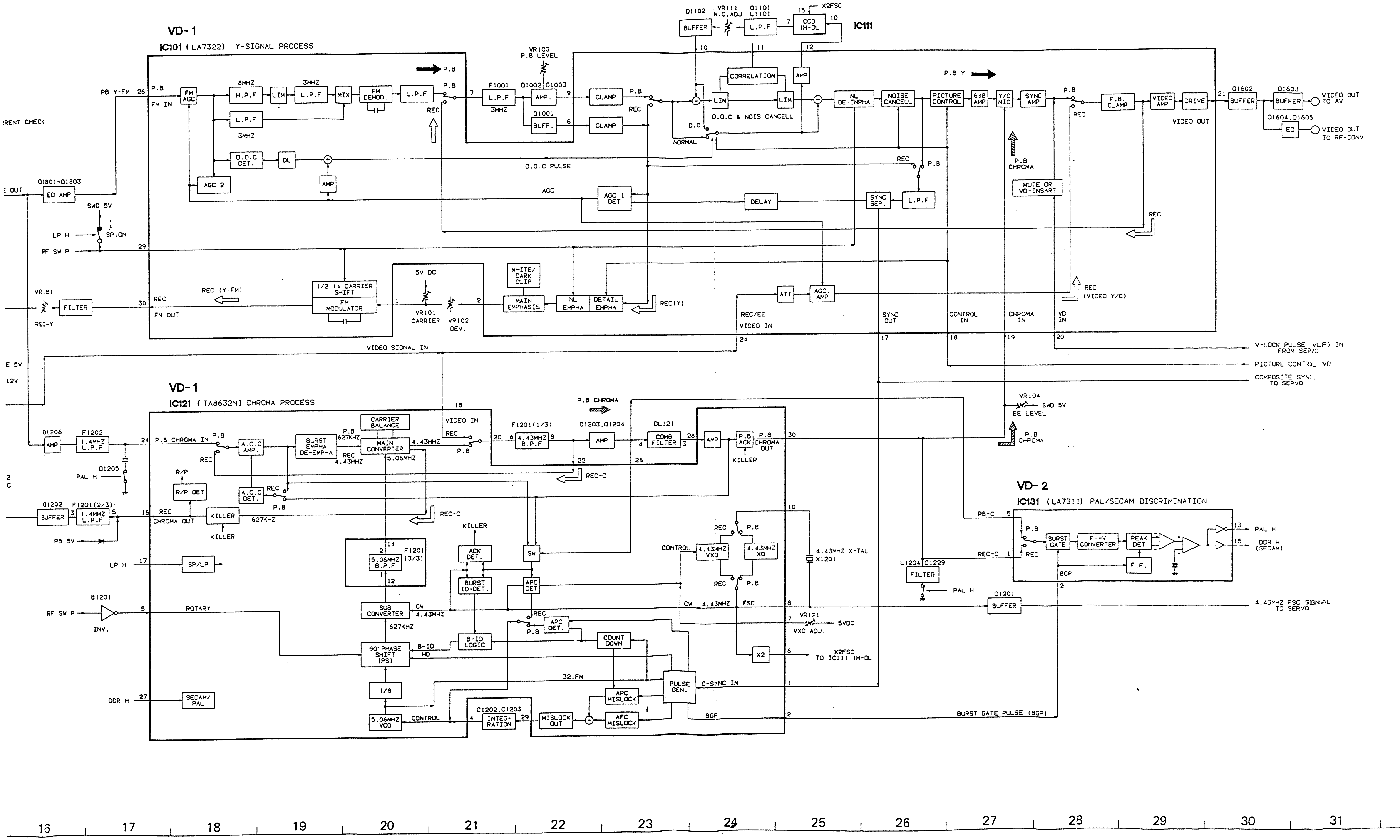
## VP-1


IC181 ( LA7320 ) REC/PRE.AMP
HEAD DRUM
R.T
CH1
V-HEAD
CH2
R.T
AMP
SW
REC:ON
L
H
AMP
RF SW P
REC CURRENT CHECK
ENV.OUT
RF.
ENVELOPE OUT
Q1801-Q1803
EQ AMP
PB Y-
SWD 5V
LP H
SP:C
RF SW P
VR181
REC-Y
FILTER
CURRENT AMP
Y/C MIX AMP
RF SWITCHING PULSE
RF SW P
PB EE
PB EE 5V
REC
REC 12V
Q1206
AMP
F1202
1.4MHZ L.P.F
Q1205
PAL H
VR182
REC.C
IC161 (BA7021) INPUT SELECT
MUTE
AV VIDEO IN
TUNER VIDEO IN
INPUT VIDEO SIG.
PB H
EXT H
Q1202
BUFFER
F1201(2/3)
1.4MHZ L.P.F
PB 5V
LP
B1201
RF SW P
INV.
19
16
18
3
5
13
14
6
1
2
11
1
3
6
8
2
4
7
3
5

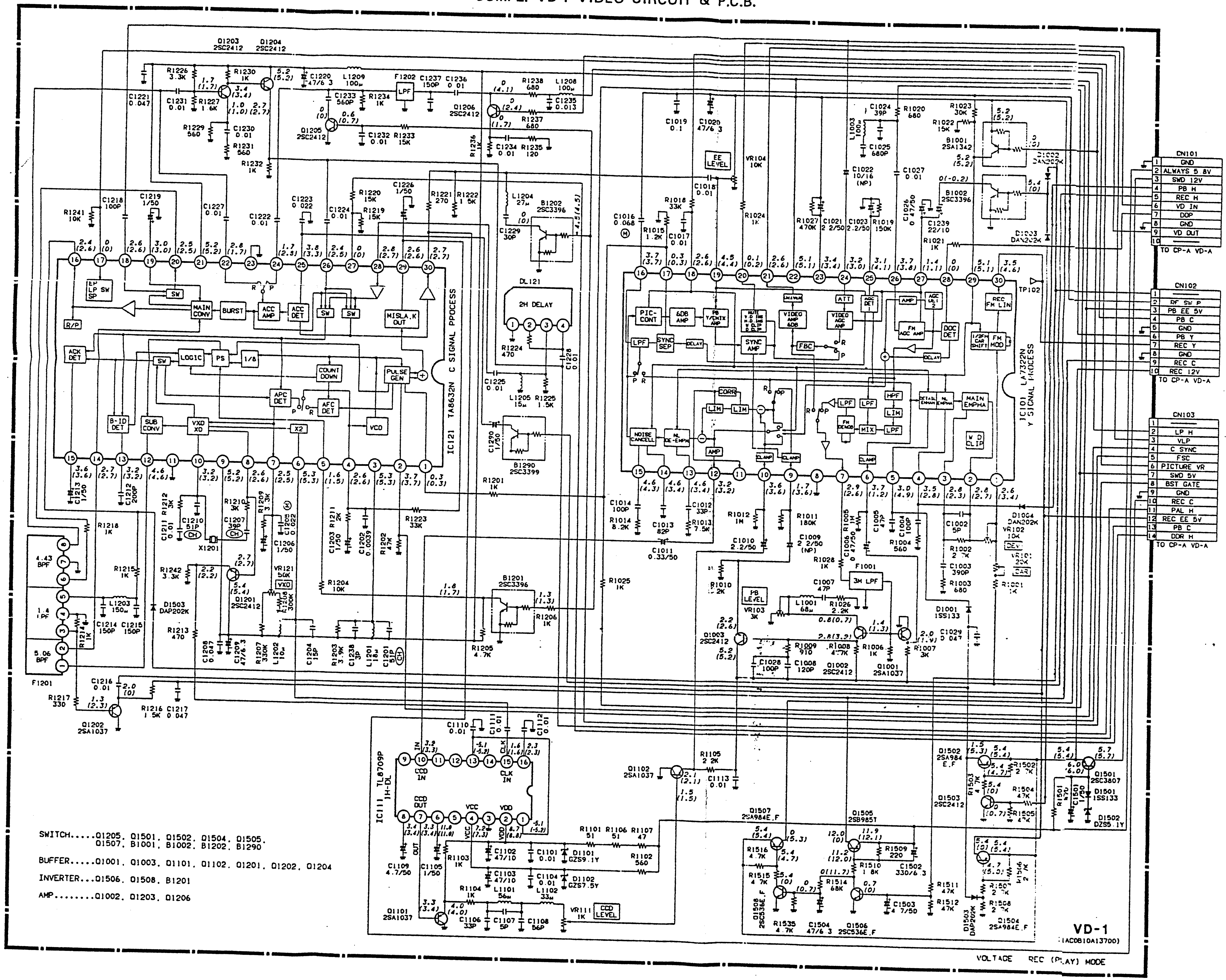
DDR

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

# VIDEO CIRCUIT BASIC BLOCK DIAGRAM


VD-1
IC101 (LA7322) Y-SIGNAL PROCESS
PB Y-FM
P.B FM IN
FM AGC
8MHZ H.P.F
LIM
3MHZ L.P.F
MIX
FM DEMOD.
L.P.F
L.P.F 3MHZ
D.O.C DET.
DL
AMP
AGC 2
P.B
REC
F1001 L.P.F 3MHZ
Q1002 Q1003 AMP.
Q1001 BUFF.
VR103 P.B LEVEL
CLAMP
CLAMP
Q1102 BUFFER
VR111 N.C.ADJ
Q1101 L1101 L.P.F
CCD 1H-DL
X2FSC
IC111
CORRELATION
AMP
LIM
LIM
D.O.C & NOIS CANCELL
D.O
NORMAL
P.B Y
NL DE-EMPHA
NOISE CANCELL
PICTURE CONTROL
6dB AMP
Y/C MIC
SYNC AMP
F.B. CLAMP
VIDEO AMP
DRIVE
VIDEO OUT
Q1602 BUFFER
Q1603 BUFFER
VIDEO OUT TO AV
Q1604,Q1605 EQ
VIDEO OUT TO RF-CONV
D.O.C PULSE
AGC
AGC 1 DET
DELAY
SYNC SEP.
L.P.F
P.B CHROMA
MUTE OR VD-INSART
RENT CHECK
E OUT
Q1801-Q1803 EQ AMP
SWD 5V
LP H
SP:ON
RF SW P
VR181
FILTER
REC-Y
REC (Y-FM)
REC FM OUT
1/2 fH CARRIER SHIFT
FM MODULATOR
5V DC
VR101 CARRIER
VR102 DEV.
WHITE/ DARK CLIP
MAIN EMPHASIS
NL EMPHA
DETAIL EMPHA
REC(Y)
ATT
AGC. AMP
REC (VIDEO Y/C)
REC/EE VIDEO IN
SYNC OUT
CONTROL IN
CHROMA IN
VD IN
V-LOCK PULSE (VLP) IN FROM SERVO
PICTURE CONTROL VR
COMPOSITE SYNC. TO SERVO
VIDEO SIGNAL IN
E 5V
12V
VD-1
IC121 (TA8632N) CHROMA PROCESS
Q1206 AMP
F1202 1.4MHZ L.P.F
P.B CHROMA IN
Q1205 PAL H
A.C.C AMP.
BURST EMPHA DE-EMPHA
CARRIER BALANCE
MAIN CONVERTER
627KHZ
4.43MHZ
5.06MHZ
VIDEO IN
F1201(1/3) 4.43MHZ B.P.F
Q1203,Q1204 AMP
DL121 COMB FILTER
P.B CHROMA
REC-C
AMP
P.B ACK
P.B CHROMA OUT
KILLER
VR104 SWD 5V EE LEVEL
R/P
R/P DET
A.C.C DET.
Q1202 BUFFER
F1201(2/3) 1.4MHZ L.P.F
REC CHROMA OUT
KILLER
PB 5V
LP H
SP/LP
B1201 INV.
RF SW P
ROTARY
DDR H
SECAM/ PAL
F1201 (3/3) 5.06MHZ B.P.F
SUB CONVERTER
CW
90° PHASE SHIFT (PS)
B-ID
HD
1/8
5.06MHZ VCO
CONTROL
C1202,C1203 INTEG-RATION
ACK DET.
BURST ID-DET.
B-ID LOGIC
SW
APC DET
APC DET.
COUNT DOWN
PULSE GEN.
C-SYNC IN
321FM
APC MISLOCK
AFC MISLOCK
MISLOCK OUT
BGP
4.43MHZ VXO
4.43MHZ XO
4.43MHZ X-TAL X1201
VR121 VXO ADJ. 5VDC
X2
X2FSC TO IC111 1H-DL
CW 4.43MHZ FSC
VD-2
IC131 (LA7311) PAL/SECAM DISCRIMINATION
PB-C
REC-C
BURST GATE
F—V CONVERTER
PEAK DET
F.F.
PAL H
DDR H (SECAM)
L1204 C1229 FILTER
Q1201 BUFFER
4.43MHZ FSC SIGNAL TO SERVO
BURST GATE PULSE (BGP)
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

# COMPL. VD-1 VIDEO CIRCUIT & P.C.B.


IC121 TA8632N C SIGNAL PROCESS
IC101 LA7322N Y SIGNAL PROCESS
IC111 TL8709P 1H-DL
DL121 2H DELAY
Q1203 2SC2412
Q1204 2SC2412
Q1205 2SC2412
Q1206 2SC2412
Q1201 2SC2412
Q1202 2SA1037
B1201 2SC3396
B1202 2SC3396
B1290 2SC3399
B1001 2SA1342
B1002 2SC3396
Q1001 2SA1037
Q1002 2SC2412
Q1003 2SC2412
Q1101 2SA1037
Q1102 2SA1037
Q1501 2SC3807
Q1502 2SA984 E.F
Q1503 2SC2412
Q1504 2SA984E.F
Q1505 2SB985T
Q1506 2SC536E.F
Q1507 2SA984E.F
Q1508 2SC536E.F
D1001 1SS133
D1002 DAN202K
D1003 DAN202K
D1004 DAN202K
D1101 GZS9.1Y
D1102 GZS7.5Y
D1501 1SS133
D1502 DZS5.1Y
D1503 DAP202K
F1201
F1202 LPF
F1001 3M LPF
4.43 BPF
1.4 LPF
5.06 BPF
X1201
VR121 50K
VR103 3K PB LEVEL
VR104 10K EE LEVEL
VR102 10K DEV
VR101 20K CAR
VR111 1K CCD LEVEL
LP SW
R/P
ACK DET
B-ID DET
SUB CONV
VXO XO
X2
SW
LOGIC
PS
1/8
COUNT DOWN
PULSE GEN
APC DET
AFC DET
VCO
MAIN CONV
BURST
ACC AMP
ACC DET
MISLA.K OUT
PIC-CONT
6DB AMP
PB Y/CHIX AMP
SYNC SEP
DELAY
SYNC AMP
VIDEO AMP 6DB
VIDEO AGC AMP
ATT
AGC DET
FBC
FM AGC AMP
DOC DET
1/2FH CAR SHIFT
FM MOD
REC FM LIN
AMP
AGC DET 2
NOISE CANCELL
NL DE-EMPH
CORR
LIM
CLAMP
LPF
HPF
MIX
FM DEMOD
DETAIL ENHAN
NL EMPHA
MAIN EMPHA
W.D CLIP
TP102
CCD IN
CCD OUT
CLK IN
VCC
VDD
OUT
CN101
1 GND
2 ALWAYS 5.8V
3 SWD 12V
4 PB H
5 REC H
6 VD IN
7 DOP
8 GND
9 VD OUT
10
TO CP-A VD-A
CN102
1
2 RF SW P
3 PB EE 5V
4 PB C
5 GND
6 PB Y
7 REC Y
8 GND
9 REC C
10 REC 12V
TO CP-A VD-A
CN103
1
2 LP H
3 VLP
4 C SYNC
5 FSC
6 PICTURE VR
7 SWD 5V
8 BST GATE
9 GND
10 REC C
11 PAL H
12 REC EE 5V
13 PB C
14 DDR H
TO CP-A VD-A
VD-1
(AC0B10A13700)

SWITCH.....Q1205, Q1501, Q1502, Q1504, Q1505,
Q1507, B1001, B1002, B1202, B1290

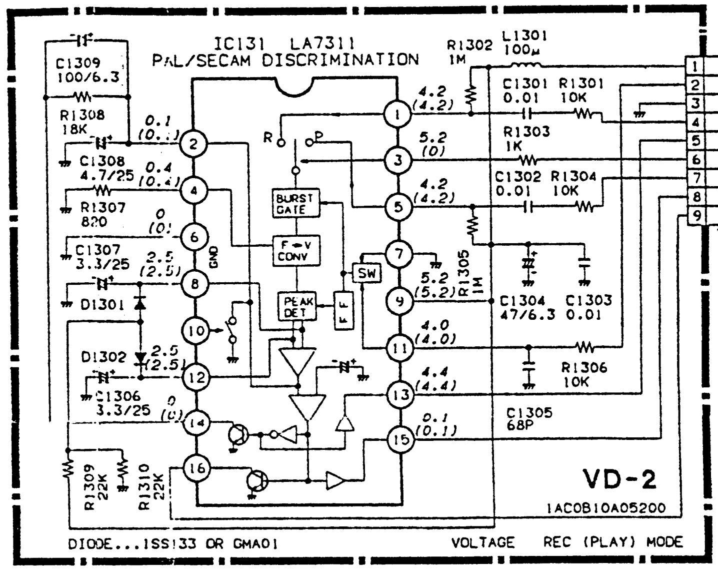
BUFFER......Q1001, Q1003, Q1101, Q1102, Q1201, Q1202, Q1204

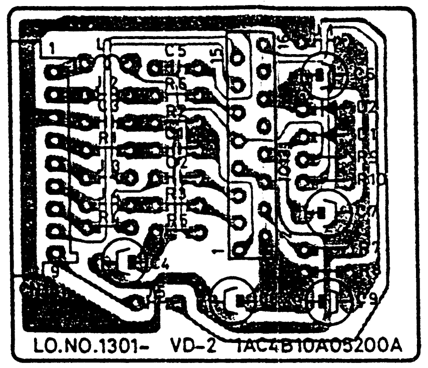
INVERTER...Q1506, Q1508, B1201

AMP.........Q1002, Q1203, Q1206

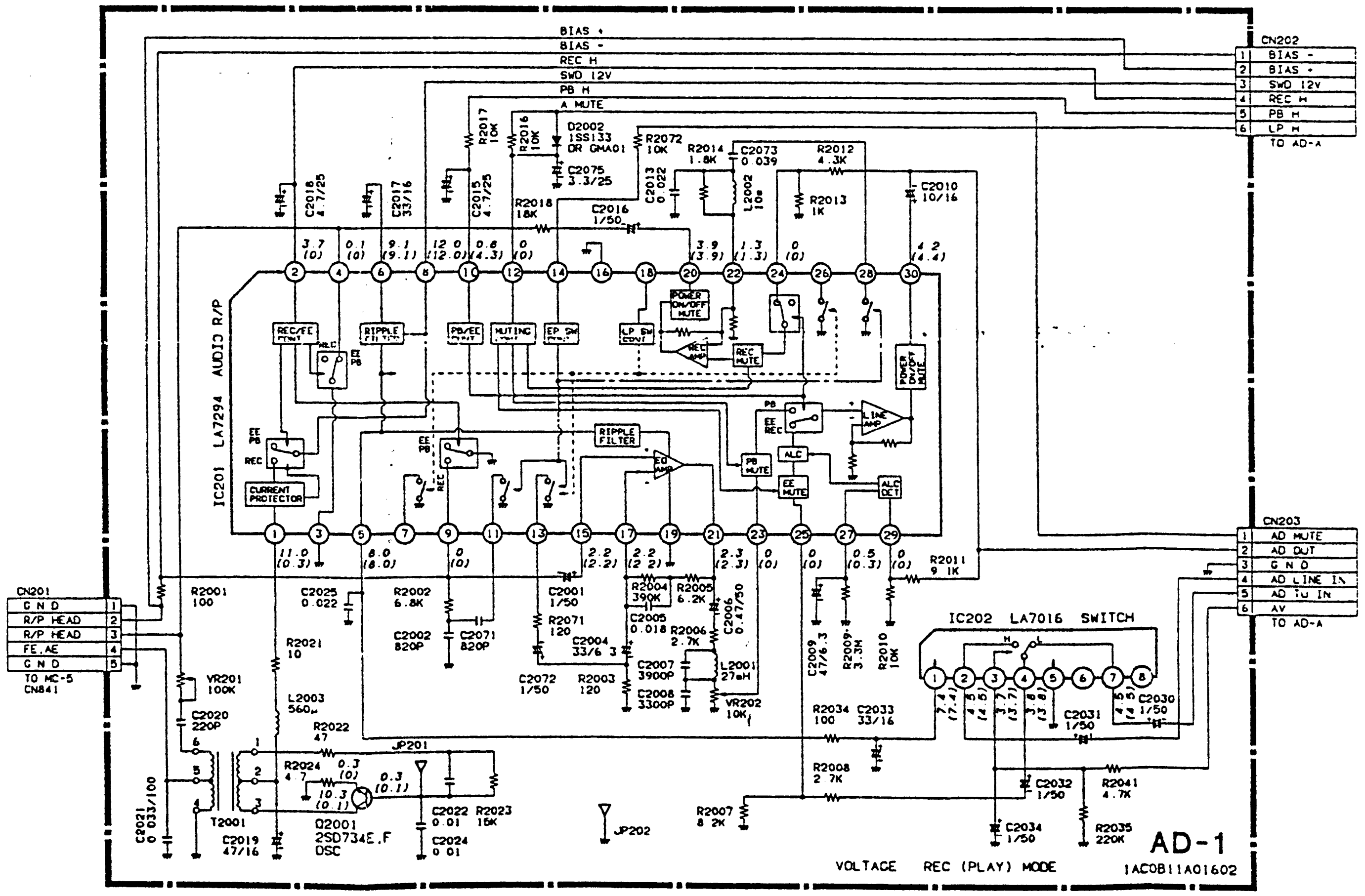
VOLTAGE REC (PLAY) MODE

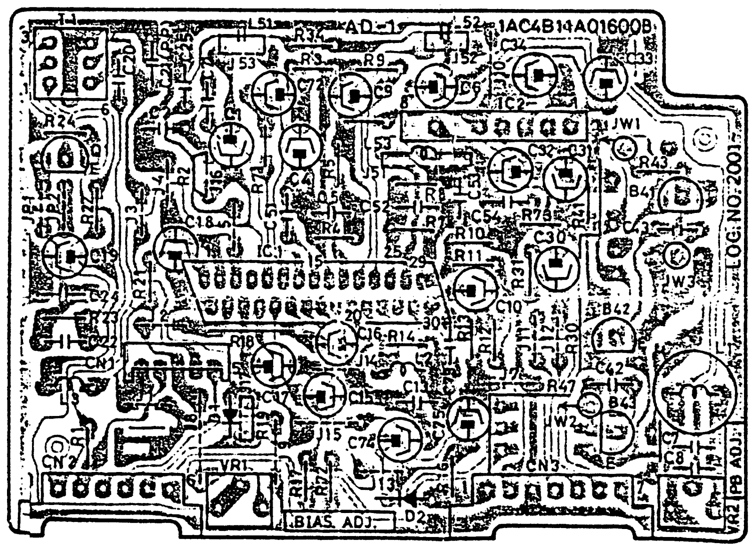
## COMPL. VD-2 VIDEO CIRCUIT & P.C.B.


IC131 LA7311
PAL/SECAM DISCRIMINATION
CN131
1 SWD 5V
2 BST GATE
3 GND
4 REC C
5 PAL H
6 REC EE 5V
7 PB C
8 DDR H
9 MESECAM (L)
TO CP-A VD-A
BURST GATE
F→V CONV
PEAK DET
SW
VD-2
1AC0B10A05200
DIODE...1SS133 OR GMA01
VOLTAGE REC (PLAY) MODE

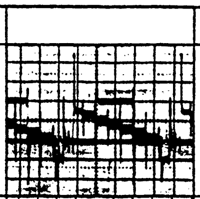
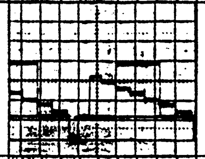
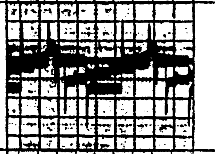
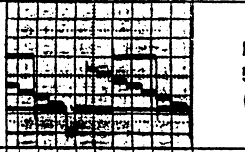
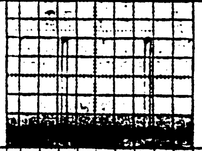
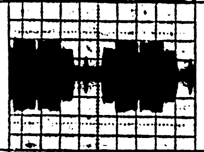
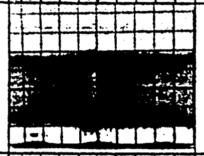
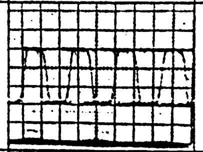
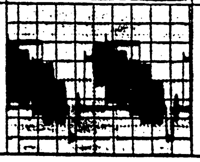

LO.NO.1301- VD-2 1AC4B10A05200A

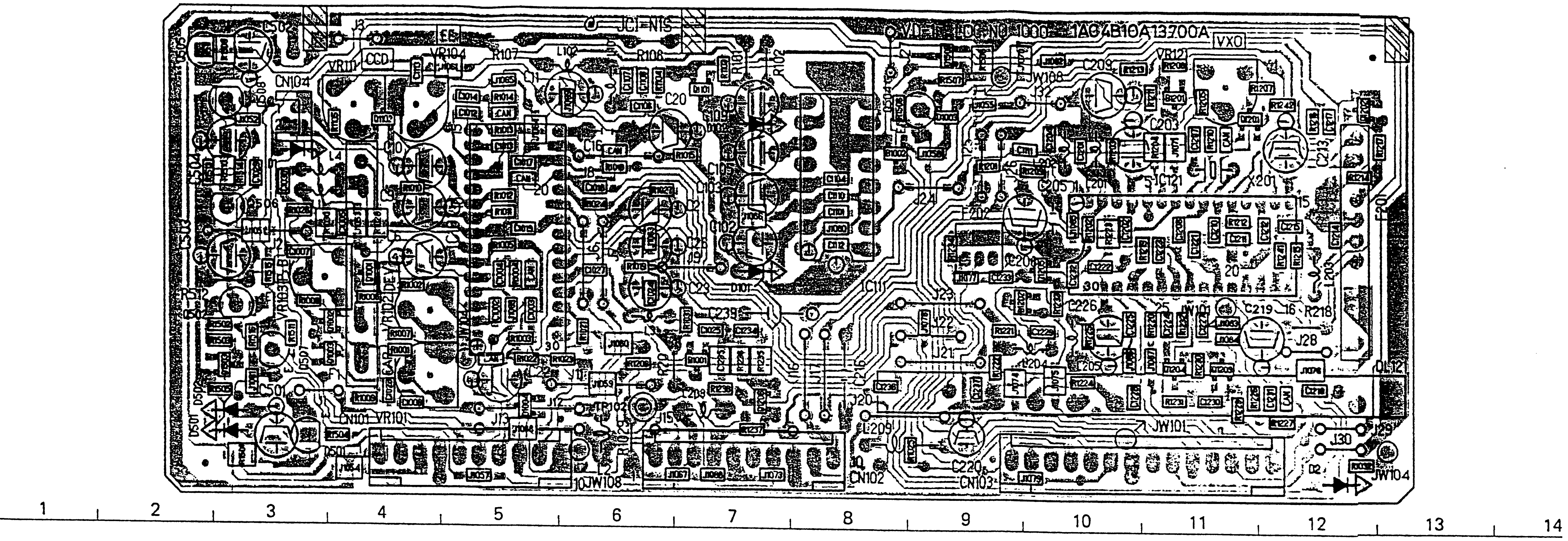
## COMPL. AD-1 AUDIO CIRCUIT & P.C.B.


CN202
1 BIAS -
2 BIAS -
3 SWD 12V
4 REC H
5 PB H
6 LP H
TO AD-A
IC201 LA7294 AUDIO R/P
CN203
1 AD MUTE
2 AD OUT
3 GND
4 AD LINE IN
5 AD TU IN
6 AV
TO AD-A
CN201
1 GND
2 R/P HEAD
3 R/P HEAD
4 FE.AE
5 GND
TO MC-5 CN841
IC202 LA7016 SWITCH
T2001
D2001 2SD734E,F OSC
JP201
JP202
AD-1
VOLTAGE REC (PLAY) MODE
1AC0B11A01602

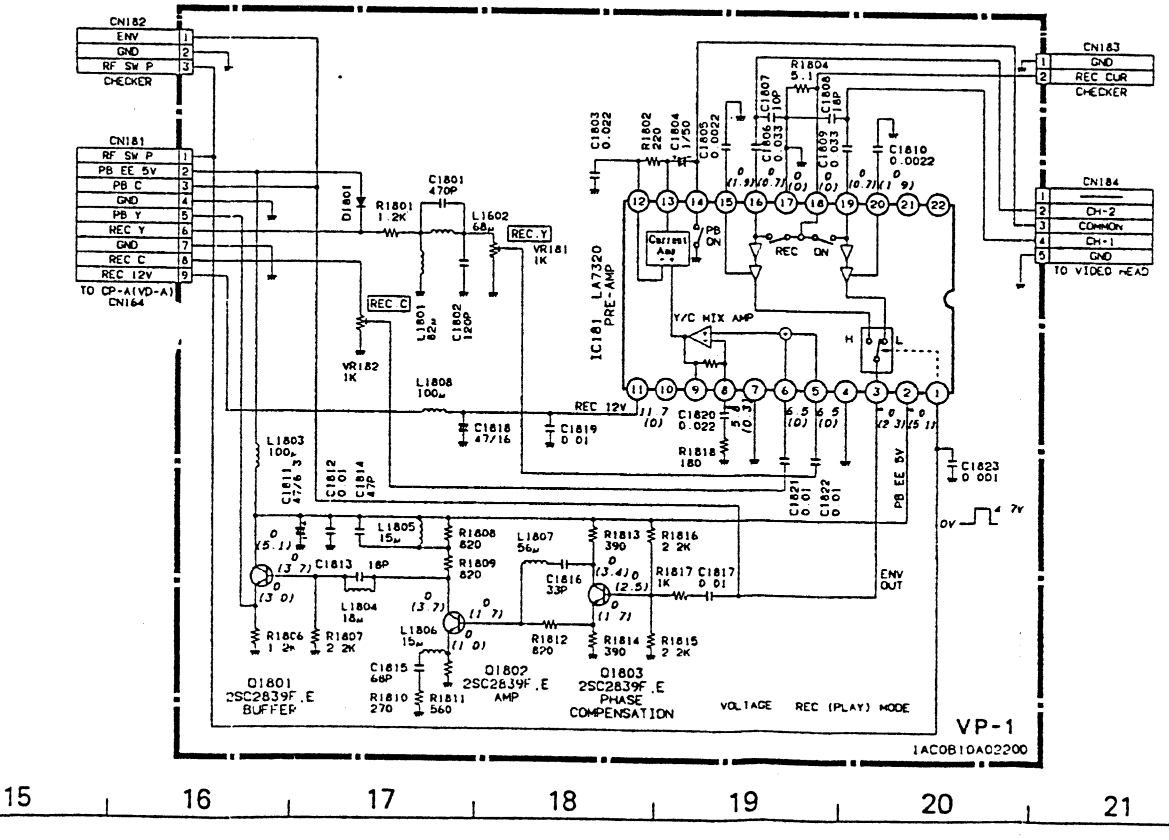

AD-1 1AC4B14AQ1600B
LOG.NO.2001-
BIAS ADJ.
PB ADJ.
VR1

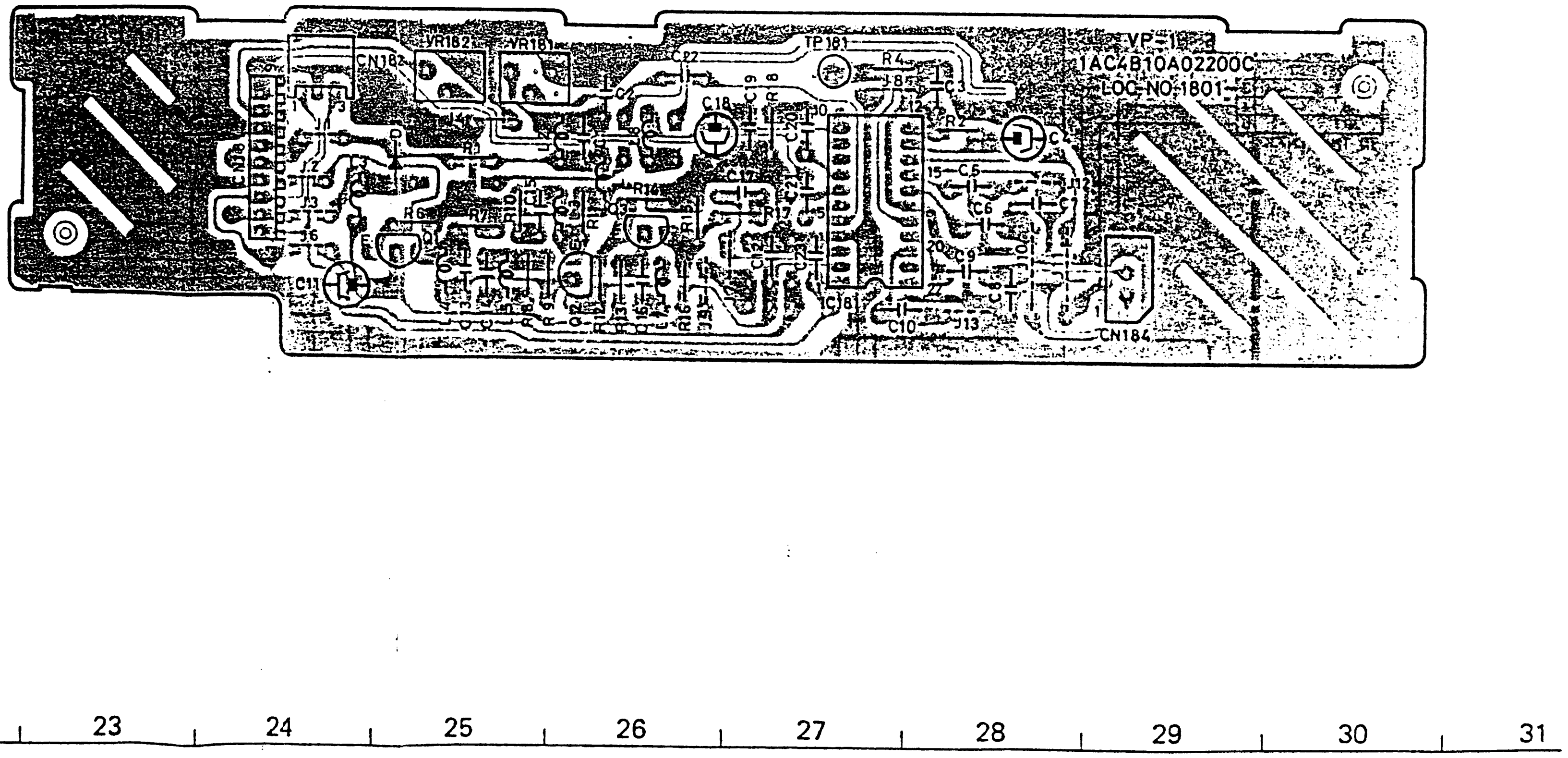
## WAVEFORM OF VIDEO

| Pin No. | | |
|---|---|---|
| IC101<br>(2) |  | REC<br>1.2 Vp-p<br>(200 mV/div) |
| (6) |  | REC<br>500 m Vp-p<br>(100 mV/div) |
| (6) |  | PLAY<br>300 m Vp-p<br>(100 mV/div) |
| (9) (10) |  | PLAY<br>500 m Vp-p<br>(100 mV/div) |
| (17) |  | 4 Vp-p<br>15.625 KHz<br>(1 V/div) |
| (19) |  | PLAY<br>320 m Vp-p<br>(100 mV/div) |
| (26) |  | PLAY<br>400 m Vp-p<br>(100 mV/div) |
| (30) |  | REC<br>1.5 Vp-p<br>(500 mV/div) |
| TP161<br>(CP-1) |  | PLAY<br>1 Vp-p<br>(200 mV/div) |

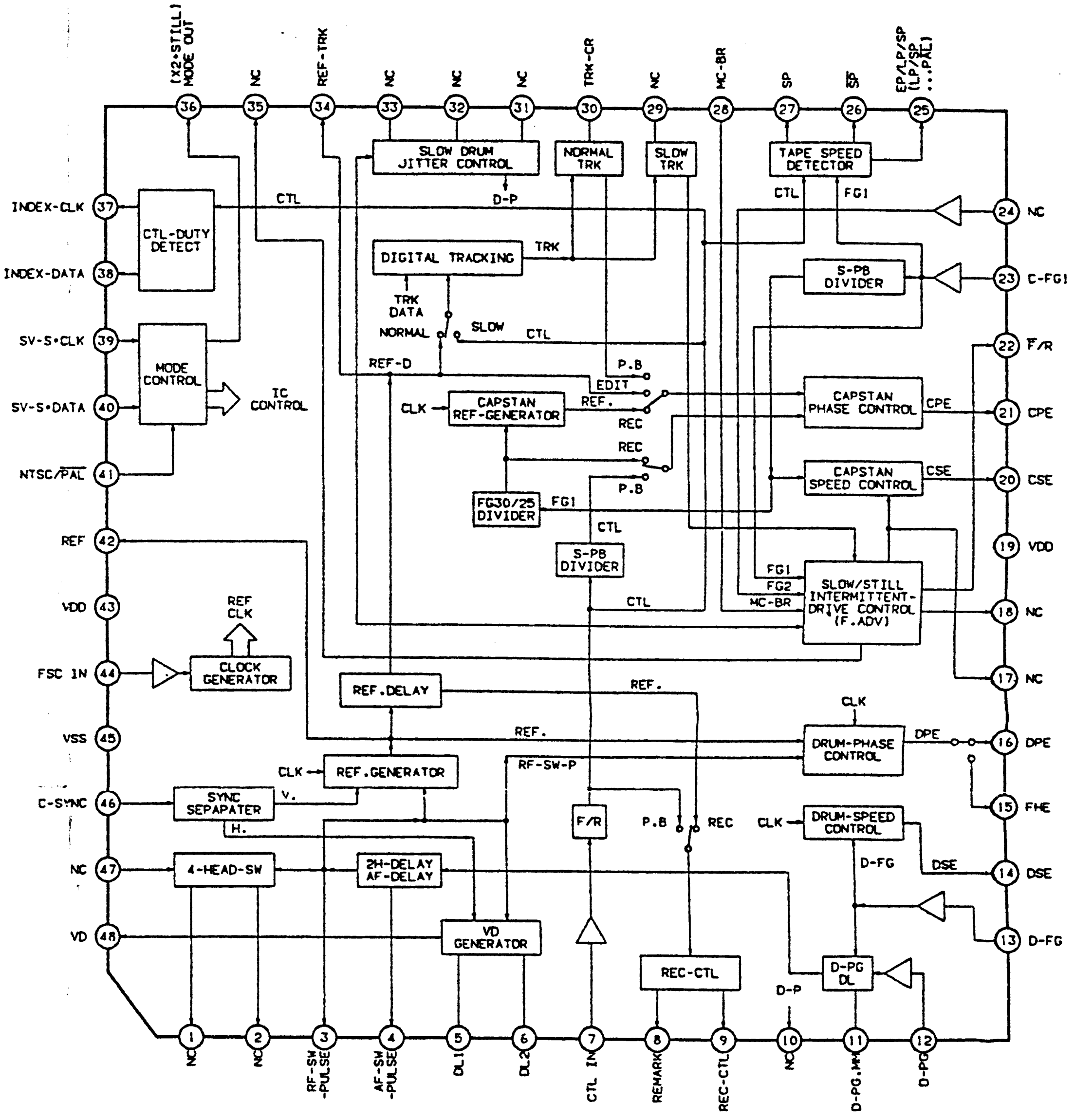

VDF1 LOC NO 1000 1AC4B10A13700A
VXO
CCD
VR104
VR103
VR102
VR101
VR121
CN101
CN102
CN103
CN104
IC11
IC121
JW101
JW104
JW108
1
2
3
4
5
6
7
8
9
10
11
12
13
14

## COMPL. VP-1 VIDEO PRE-AMP CIRCUIT & P.C.B.

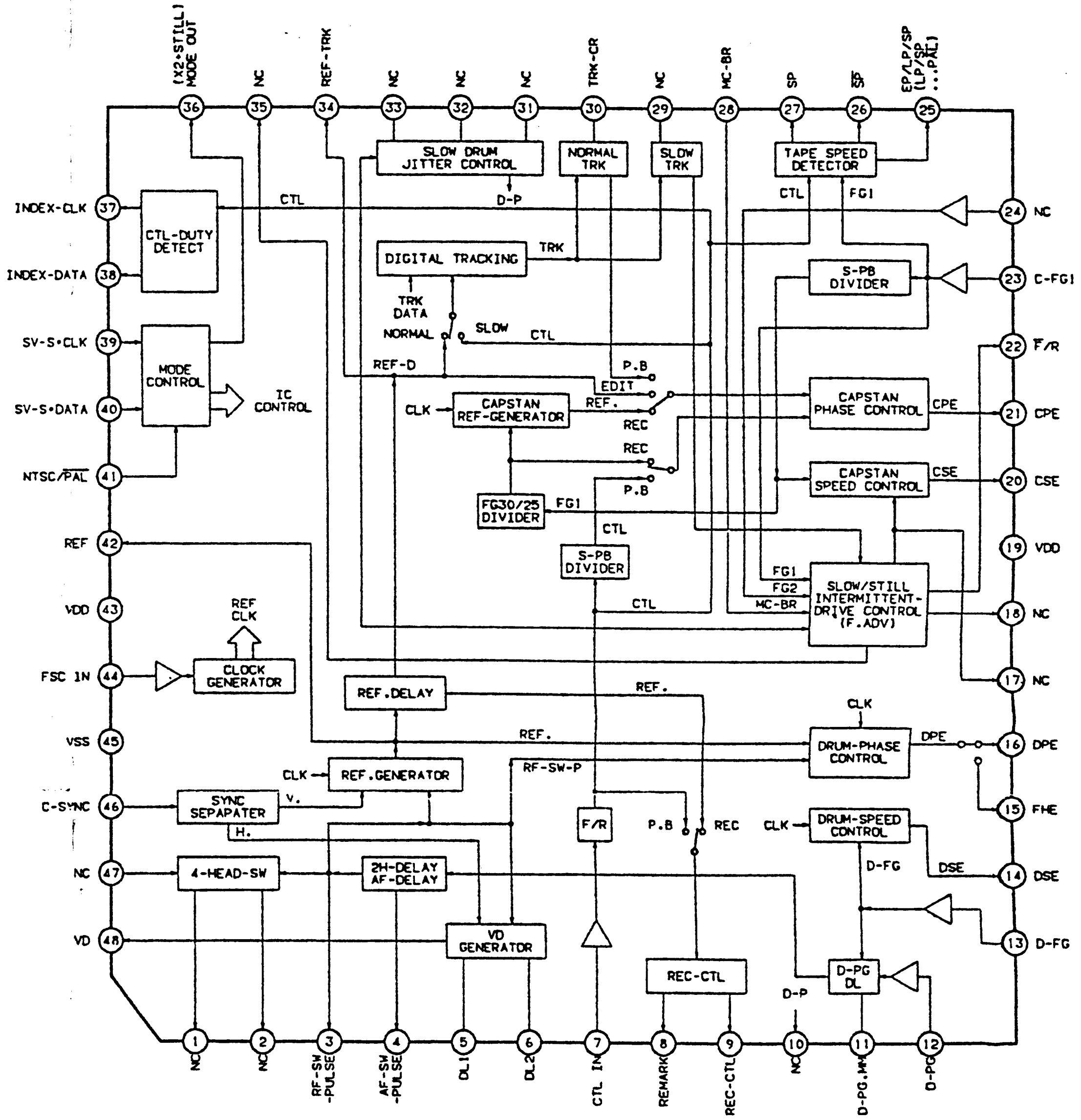

CN182
ENV
GND
RF SW P
CHECKER
CN181
RF SW P
PB EE 5V
PB C
GND
PB Y
REC Y
GND
REC C
REC 12V
TO CP-A(VD-A) CN164
CN183
GND
REC CUR
CHECKER
CN184
CH-2
COMMON
CH-1
GND
TO VIDEO HEAD
IC181 LA7320 PRE-AMP
Current Amp
Y/C MIX AMP
REC
ON
PB
REC.Y
VR181 1K
REC C
VR182 1K
Q1801 2SC2839F.E BUFFER
Q1802 2SC2839F.E AMP
Q1803 2SC2839F.E PHASE COMPENSATION
ENV OUT
VOLTAGE REC (PLAY) MODE
VP-1
1AC0B10AC2200
15
16
17
18
19
20
21


VP-1
1AC4B10A02200C
LOC NO 1801
CN182
VR182
VR181
TP181
IC181
CN184
22
23
24
25
26
27
28
29
30
31

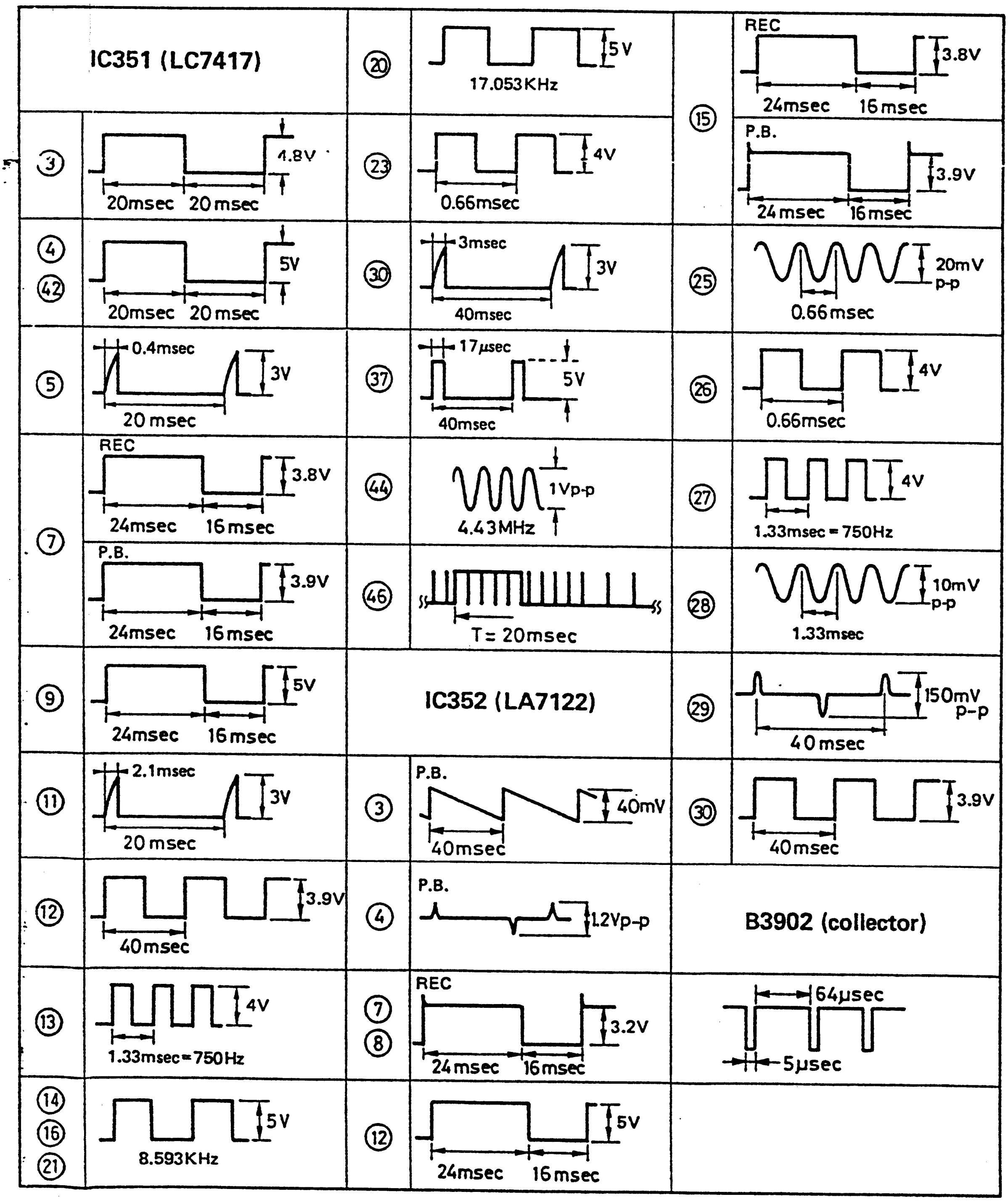
# IC351 (LC7417) DIGITAL SERVO IC. INTER BLOCK DIAGRAM

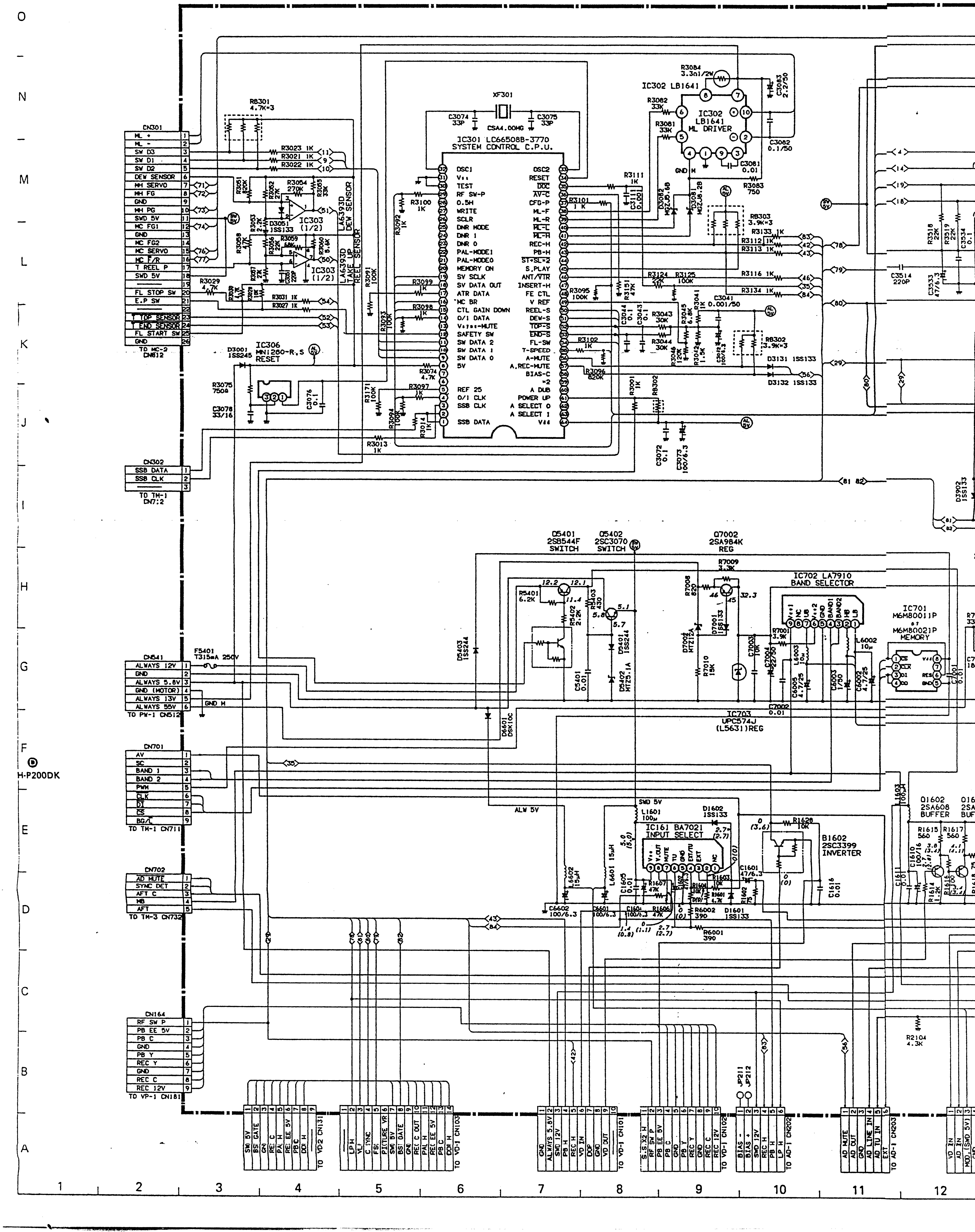

(X2•STILL) MODE OUT
NC
REF-TRK
NC
NC
NC
TRK-CR
NC
MC-BR
SP
SP
EP/LP/SP (LP/SP ...PAL)
36
35
34
33
32
31
30
29
28
27
26
25
SLOW DRUM JITTER CONTROL
NORMAL TRK
SLOW TRK
TAPE SPEED DETECTOR
D-P
CTL
CTL
FG1
INDEX-CLK 37
INDEX-DATA 38
SV-S•CLK 39
SV-S•DATA 40
NTSC/PAL 41
REF 42
VDD 43
FSC IN 44
VSS 45
C-SYNC 46
NC 47
VD 48
CTL-DUTY DETECT
MODE CONTROL
IC CONTROL
DIGITAL TRACKING
TRK
TRK DATA
NORMAL
SLOW
CTL
REF-D
P.B
EDIT
REF.
REC
CLK
CAPSTAN REF-GENERATOR
REC
P.B
FG30/25 DIVIDER
FG1
S-PB DIVIDER
CTL
CTL
S-PB DIVIDER
CAPSTAN PHASE CONTROL
CPE
CAPSTAN SPEED CONTROL
CSE
FG1
FG2
MC-BR
SLOW/STILL INTERMITTENT-DRIVE CONTROL (F.ADV)
REF CLK
CLOCK GENERATOR
REF.DELAY
REF.
REF.
CLK
DRUM-PHASE CONTROL
DPE
CLK
REF.GENERATOR
RF-SW-P
SYNC SEPAPATER
V.
H.
F/R
P.B
REC
CLK
DRUM-SPEED CONTROL
D-FG
DSE
4-HEAD-SW
2H-DELAY AF-DELAY
VD GENERATOR
REC-CTL
D-P
D-PG DL
24 NC
23 C-FG1
22 F/R
21 CPE
20 CSE
19 VDD
18 NC
17 NC
16 DPE
15 FHE
14 DSE
13 D-FG
1
2
3
4
5
6
7
8
9
10
11
12
NC
NC
RF-SW -PULSE
AF-SW -PULSE
DL1
DL2
CTL IN
REMARK
REC-CTL
NC
D-PG.MM
D-PG

# IC351 (LC7417) DIGITAL SERVO IC. INTER BLOCK DIAGRAM


(X2•STILL) MODE OUT
36
NC
35
REF-TRK
34
NC
33
NC
32
NC
31
TRK-CR
30
NC
29
MC-BR
28
SP
27
SP
26
EP/LP/SP (LP/SP ...PAL)
25
SLOW DRUM JITTER CONTROL
NORMAL TRK
SLOW TRK
TAPE SPEED DETECTOR
CTL
D-P
CTL
FGI
24
NC
INDEX-CLK
37
CTL-DUTY DETECT
INDEX-DATA
38
DIGITAL TRACKING
TRK
S-PB DIVIDER
23
C-FGI
TRK DATA
NORMAL
SLOW
CTL
SV-S•CLK
39
MODE CONTROL
22
F/R
REF-D
P.B
EDIT
IC CONTROL
SV-S•DATA
40
CLK
CAPSTAN REF-GENERATOR
REF.
REC
CAPSTAN PHASE CONTROL
CPE
21
CPE
REC
NTSC/PAL
41
P.B
CAPSTAN SPEED CONTROL
CSE
20
CSE
FG30/25 DIVIDER
FG1
CTL
REF
42
19
VDD
S-PB DIVIDER
FG1
FG2
MC-BR
SLOW/STILL INTERMITTENT-DRIVE CONTROL (F.ADV)
REF CLK
CTL
VDD
43
18
NC
FSC IN
44
CLOCK GENERATOR
17
NC
REF.DELAY
REF.
CLK
VSS
45
REF.
DRUM-PHASE CONTROL
DPE
16
DPE
CLK
REF.GENERATOR
RF-SW-P
C-SYNC
46
SYNC SEPAPATER
V.
H.
15
FHE
F/R
P.B
REC
CLK
DRUM-SPEED CONTROL
NC
47
4-HEAD-SW
2H-DELAY AF-DELAY
D-FG
DSE
14
DSE
VD
48
VD GENERATOR
13
D-FG
REC-CTL
D-P
D-PG DL
1
NC
2
NC
3
RF-SW -PULSE
4
AF-SW -PULSE
5
DL1
6
DL2
7
CTL IN
8
REMARK
9
REC-CTL
10
NC
11
D-PG.MM
12
D-PG

## WAVEFORM OF SERVO


IC351 (LC7417)
③ 4.8V 20msec 20msec
④ ㊷ 5V 20msec 20msec
⑤ 0.4msec 3V 20 msec
⑦ REC 3.8V 24msec 16msec
P.B. 3.9V 24msec 16msec
⑨ 5V 24msec 16msec
⑪ 2.1msec 3V 20 msec
⑫ 3.9V 40msec
⑬ 4V 1.33msec=750Hz
⑭ ⑯ ㉑ 5V 8.593KHz
⑳ 5V 17.053KHz
㉓ 4V 0.66msec
㉚ 3msec 3V 40msec
㊲ 17μsec 5V 40msec
㊹ 1Vp-p 4.43MHz
㊻ T= 20msec
IC352 (LA7122)
③ P.B. 40mV 40msec
④ P.B. 1.2Vp-p
⑦ ⑧ REC 3.2V 24msec 16msec
⑫ 5V 24msec 16msec
⑮ REC 3.8V 24msec 16msec
P.B. 3.9V 24msec 16msec
㉕ 20mV p-p 0.66msec
㉖ 4V 0.66msec
㉗ 4V 1.33msec=750Hz
㉘ 10mV p-p 1.33msec
㉙ 150mV p-p 40msec
㉚ 3.9V 40msec
B3902 (collector)
64μsec
5μsec


IC301 LC66508B-3770
SYSTEM CONTROL C.P.U.
XF301
CSA4.00MG
C3074 33P
C3075 33P
IC302 LB1641
IC302 LB1641 ML DRIVER
R3084 3.3Ω1/2W
R3082 33K
R3081 33K
C3083 2.2/50
C3082 0.1/50
C3081 0.01
R3083 750
R3111 1K
C3111 0.001
R3101 1K
D3082 MTZJ5.6B
D3081 MTZJ6.2B
RB303 3.9K×3
RB302 3.9K×3
D3131 1SS133
D3132 1SS133
R8301 4.7K×3
CN301
ML +
ML -
SW D3
SW D1
SW D2
DEW SENSOR
MH SERVO
MH FG
GND
MH PG
SWD 5V
MC FG1
GND
MC FG2
MC SERVO
MC F/R
T REEL P
SWD 5V
FL STOP SW
E.P SW
T TOP SENSOR
T END SENSOR
FL START SW
GND
TO MC-2 CN812
IC303 (1/2)
LA6393D DEW SENSOR
LA6393D TAKE UP REEL SENSOR
D3051 1SS133
IC306 MN1280-R,S RESET
D3001 1SS245
R3075 750Ω
C3078 33/16
C3076 0.1
OSC1
Vss
TEST
RF SW-P
0.5H
WRITE
SCLR
DNR MODE
DNR 1
DNR 0
PAL-MODE1
PAL-MODE0
MEMORY ON
SV SCLK
SV DATA OUT
ATR DATA
MC BR
CTL GAIN DOWN
0/1 DATA
Vsync-MUTE
SAFETY SW
SW DATA 2
SW DATA 1
SW DATA 0
5V
REF 25
0/1 CLK
SSB CLK
SSB DATA
OSC2
RESET
DOC
AV-C
CFG-P
ML-F
ML-R
ML-L
ML-H
REC-H
PB-H
ST+SL×3
S.PLAY
ANT/VTR
INSERT-H
FE CTL
V REF
REEL-S
DEW-S
TOP-S
END-S
FL-SW
T-SPEED
A-MUTE
A.REC-MUTE
BIAS-C
×2
A DUB
POWER UP
A SELECT 0
A SELECT 1
Vdd
C3072 0.1
C3073 100/6.3
CN302
SSB DATA
SSB CLK
TO TM-1 CN712
Q5401 2SB544F SWITCH
Q5402 2SC3070 SWITCH
Q7002 2SA984K REG
R7009 3.3K
IC702 LA7910 BAND SELECTOR
IC701 M6M80011P or M6M80021P MEMORY
IC703 UPC574J (L5631)REG
D5403 1SS244
D5401 1SS244
D5402 HTZ5.1A
D6601 DSK10C
C5401 0.01
CN541
ALWAYS 12V
GND
ALWAYS 5.8V
GND (MOTOR)
ALWAYS 13V
ALWAYS 35V
TO PW-1 CN512
F5401 T315mA 250V
GND M
CN701
AV
SC
BAND 1
BAND 2
PWM
CLK
DI
CS
BG/L
TO TM-1 CN711
CN702
AD MUTE
SYNC DET
AFT C
MB
AFT
TO TM-3 CN732
ALW 5V
SWD 5V
L1601 100μ
IC161 BA7021 INPUT SELECT
D1602 1SS133
D1601 1SS133
B1602 2SC3399 INVERTER
C1616 0.01
C1601 47/6.3
R1628 10K
R6002 390
R6001 390
L6602 15μH
L6601 15μH
C6602 100/6.3
Q1602 2SA608 BUFFER
R2104 4.3K
CN164
RF SW P
PB EE 5V
PB C
GND
PB Y
REC Y
GND
REC C
REC 12V
TO VP-1 CN181
SWD 5V
BSI GATE
GND
REC C
PAL H
REC EE 5V
PB C
DOC H
TO VD2 CN131
LP H
VLP
C SYNC
FSC
PICTURE VR
SWD 5V
BSI GATE
GND
REC C OUT
PAL H
REC EE 5V
PB C
DOC H
TO VD-1 CN103
GND
ALWAYS 5.8V
SWD 12V
PB H
REC H
VD IN
DOP
GND
VD OUT
TO VD-1 CN101
S.S.X2 H
RF SW P
PB EE 5V
PB C
GND
PB Y
REC Y
GND
REC C
REC 12V
JP211
JP212
BIAS -
BIAS +
SWD 12V
REC H
PB H
LP H
TO AD-1 CN202
AD MUTE
AD OUT
GND
AD LINE IN
AD TU IN
EXT
TO AD-1 CN203
VD IN
AD IN
H-P200DK
O
N
M
L
K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
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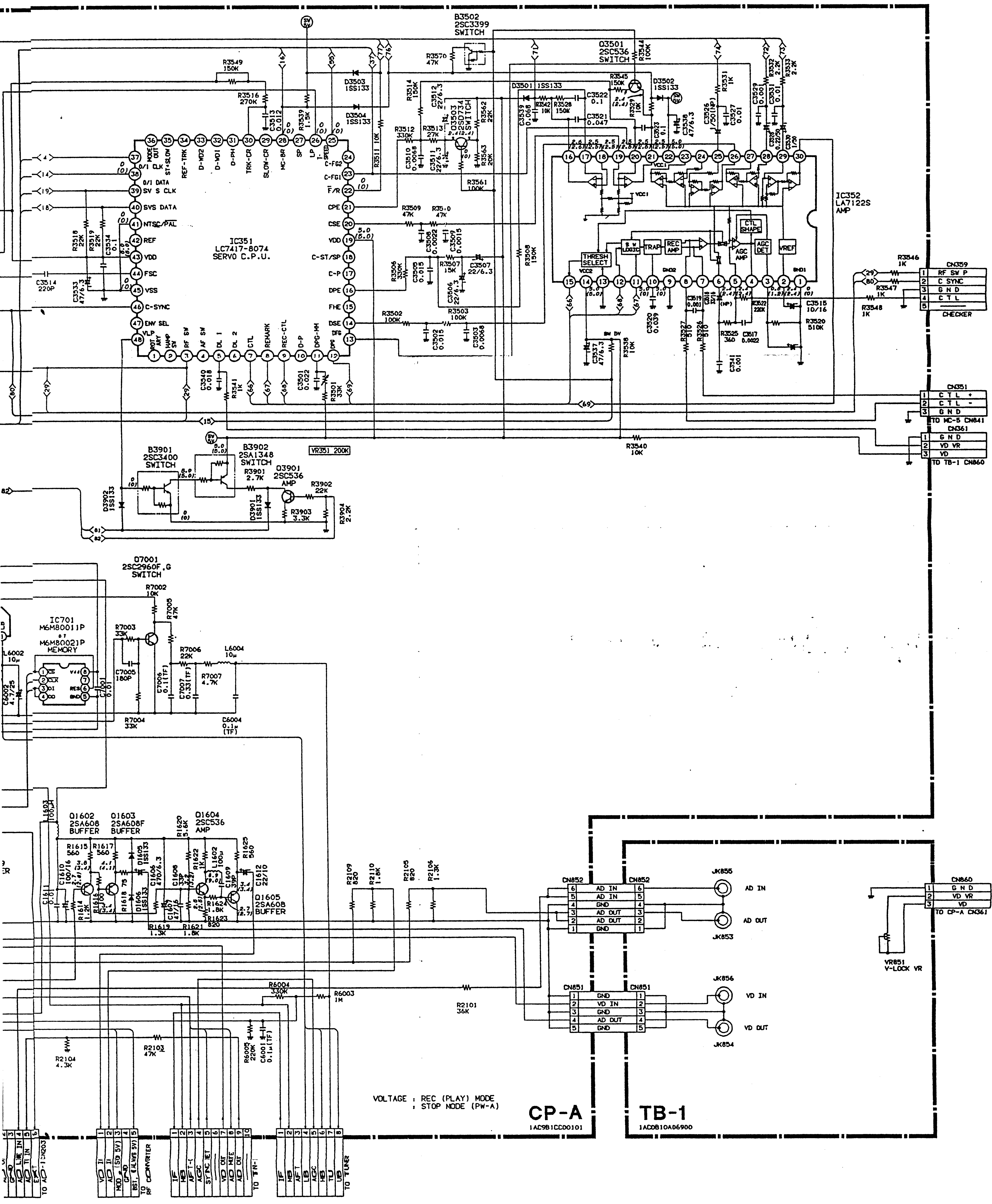
12

# COMPL. CP-A MAIN CIRCUIT



IC351
LC7417-8074
SERVO C.P.U.
IC352
LA7122S
AMP
Q3501
2SC536
SWITCH
Q3502
2SC3399
SWITCH
Q3503
2SD734
SWITCH
D3501 1SS133
D3502 1SS133
D3503 1SS133
D3504 1SS133
THRESH SELECT
S W LOGIC
TRAP
REC AMP
CTL SHAPE
AGC AMP
AGC DET
VREF
CN359
RF SW P
C SYNC
G N D
C T L
CHECKER
CN351
C T L +
C T L -
G N D
TO MC-5 CN841
CN361
G N D
VD VR
VD
TO TB-1 CN860
VR351 200K
Q3901
2SC3400
SWITCH
Q3902
2SA1348
SWITCH
Q3903
2SC536
AMP
D3901 1SS133
D3902 1SS133
Q7001
2SC2960F,G
SWITCH
IC701
M6M80011P
or
M6M80021P
MEMORY
Q1602
2SA608
BUFFER
Q1603
2SA608F
BUFFER
Q1604
2SC536
AMP
Q1605
2SA608
BUFFER
CN852
AD IN
AD IN
GND
AD OUT
AD OUT
GND
JK855
AD IN
AD OUT
JK853
CN851
GND
VD IN
GND
AD OUT
GND
JK856
VD IN
VD OUT
JK854
CN860
G N D
VD VR
VD
TO CP-A CN361
VR851
V-LOCK VR
VOLTAGE : REC (PLAY) MODE
: STOP MODE (PW-A)
CP-A
1AC9B1CC00101
TB-1
1AC0B10A06900
TO AD-1 CN203
TO RF CONVERTER
TO TN-1
TO TUNER
11
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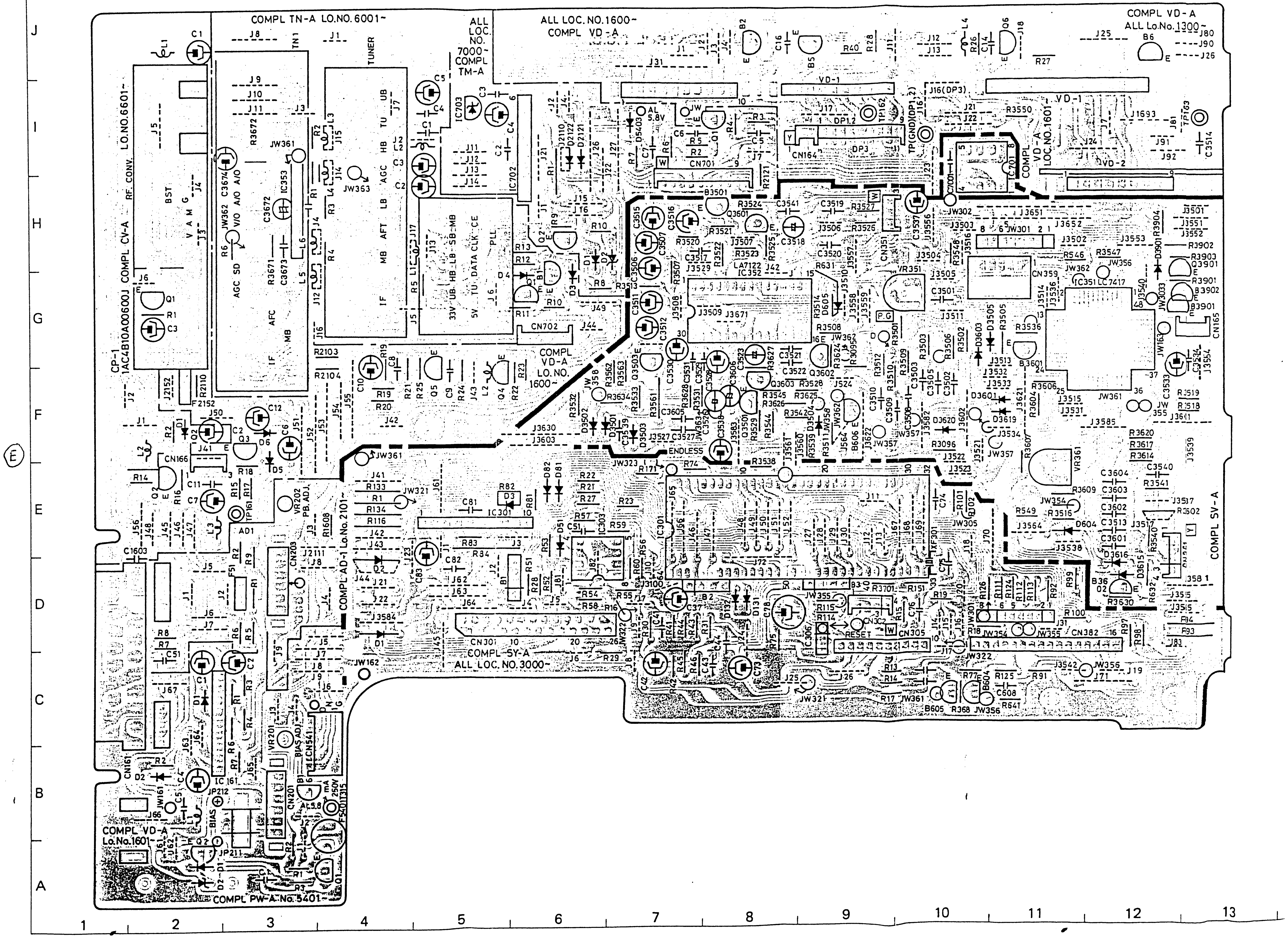
22

## CP-1 MAIN P.C.B.


COMPL TN-A LO.NO.6001~
ALL LOC. NO. 7000~ COMPL TM-A
ALL LOC. NO.1600~ COMPL VD-A
COMPL VD-A ALL Lo.No.1300~
CP-1 1AC4B10A0060OJ COMPL CV-A RF CONV. LO.NO.6601~
TUNER
VD-1
VD-2
DP3
CN701
CN702
CN164
PLL
COMPL VD-A LO.NO. 1600~
VD-A LOC.NO.1601~
IC352 LA7122
IC351 LC7417
CN359
CN165
VR351
VR361
ENDLESS
COMPL AD-1 Lo.No.2101~
COMPL SY-A ALL LOC. NO.3000~
CN301
IC301
RESET
CN305
CN382
COMPL SV-A
COMPL VD-A Lo.No.1601~
COMPL PW-A.No.5401~
IC161
VR201 BIAS ADJ.
VR202 PB. ADJ.
BIAS
K
J
I
H
G
F
E
D
C
B
A
1
2
3
4
5
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9
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11
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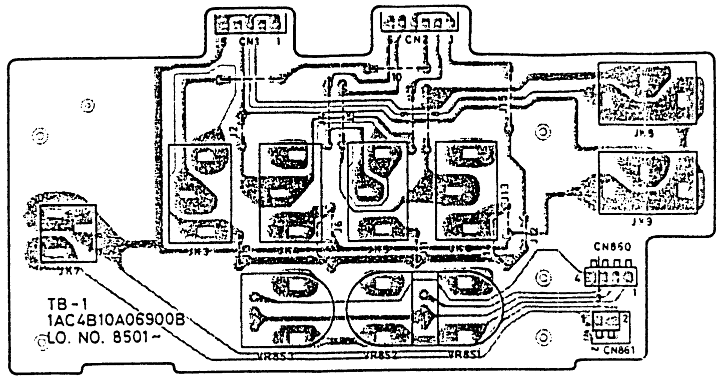
13

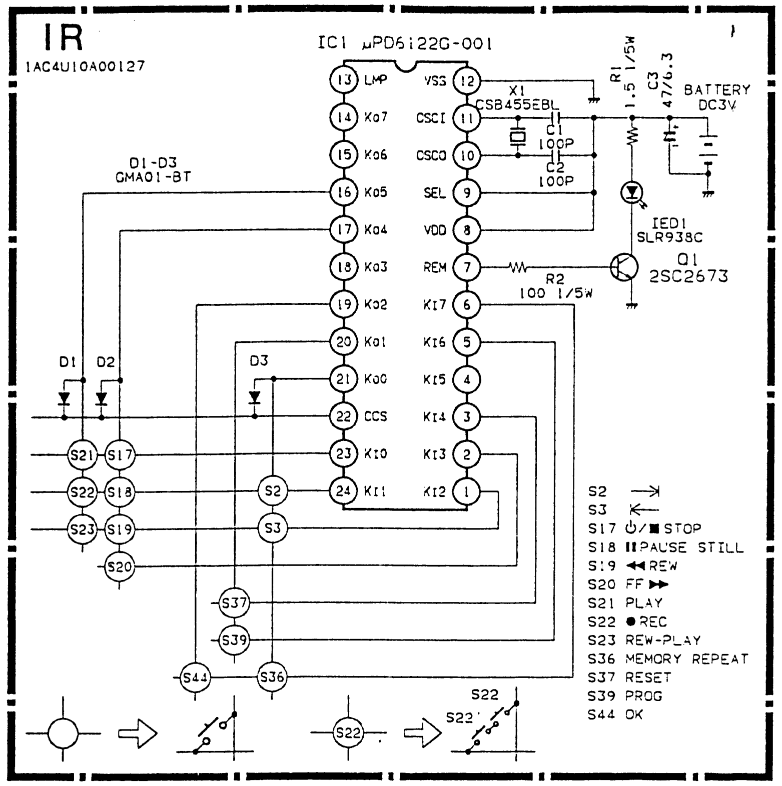
Ⓔ

## TB-1 TERMINAL P.C.B.



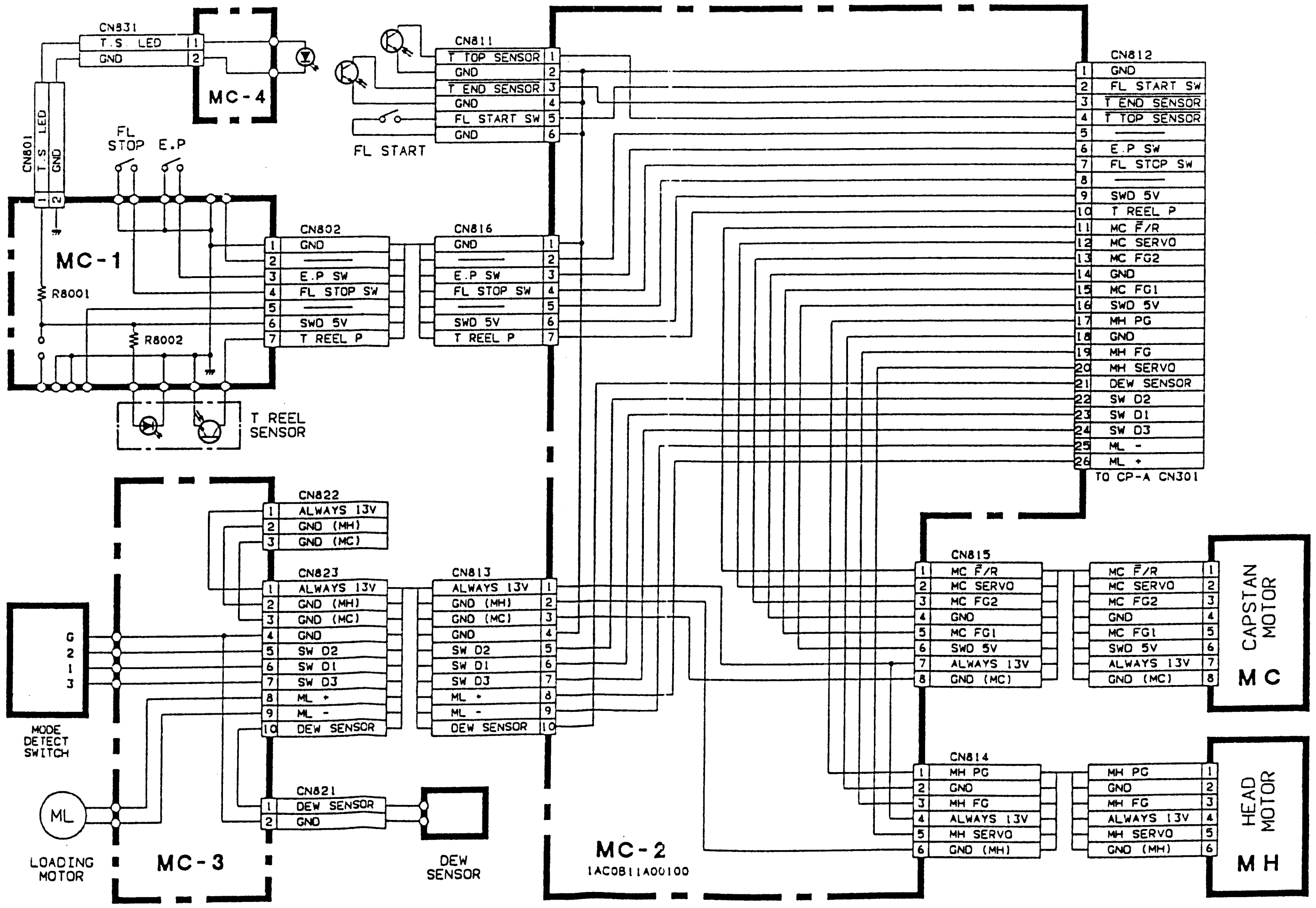
CN1
CN2
J13
CN850
CN861
VR853
VR852
VR851
TB-1
1AC4B10A06900B
LO. NO. 8501~

## IR REMOTE CONTROL CIRCUIT



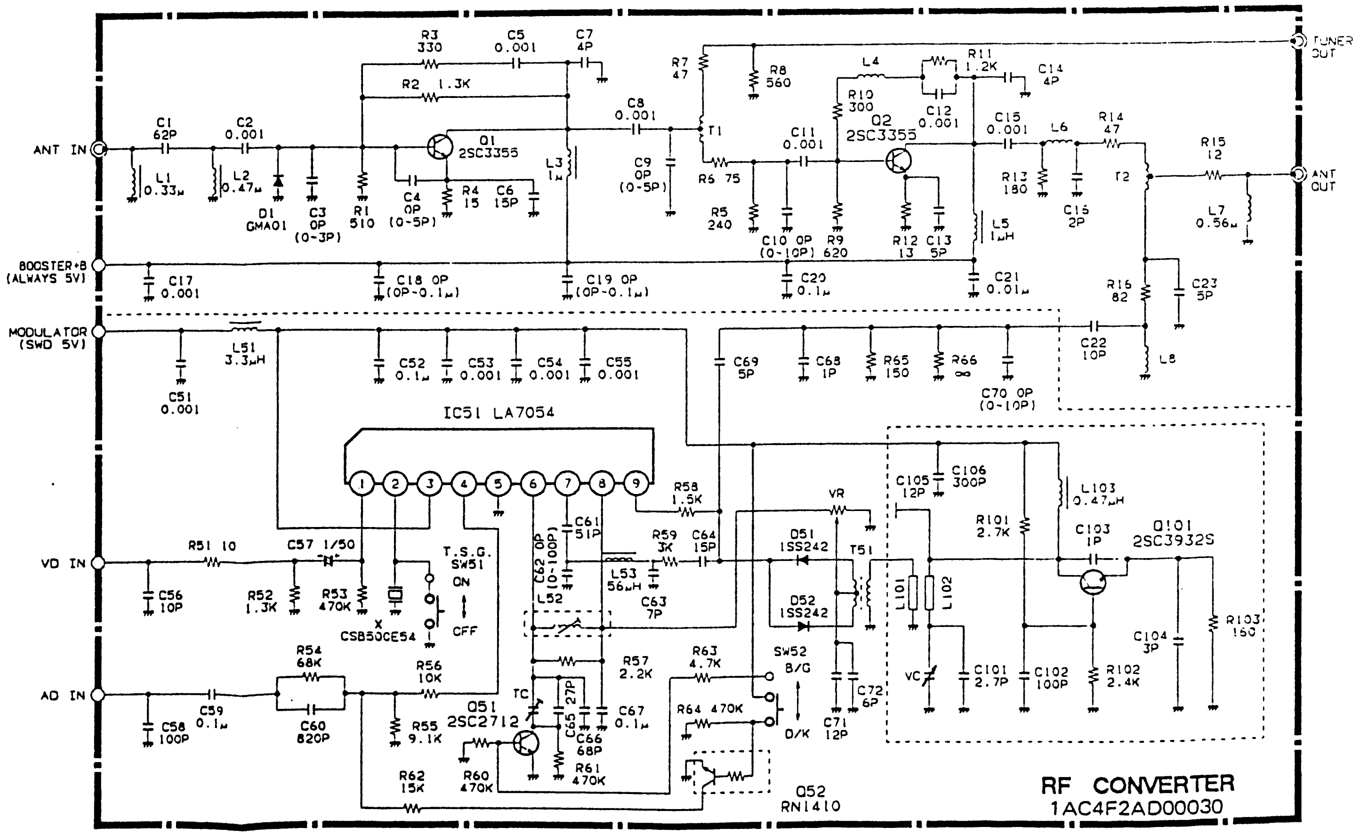
IR
1AC4U10A00127
IC1 μPD6122G-001
LMP
VSS
CSCI
CSCO
SEL
VDD
REM
Ko7
Ko6
Ko5
Ko4
Ko3
Ko2
Ko1
Ko0
CCS
KI0
KI1
KI7
KI6
KI5
KI4
KI3
KI2
X1
CSB455EBL
C1 100P
C2 100P
R1 1.5 1/5W
C3 47/6.3
BATTERY DC3V
IED1 SLR938C
Q1 2SC2673
R2 100 1/5W
D1-D3
GMA01-BT
D1
D2
D3
S2 →|
S3 |←
S17 ⏻/■ STOP
S18 ❚❚PAUSE STILL
S19 ◀◀REW
S20 FF ▶▶
S21 PLAY
S22 ●REC
S23 REW-PLAY
S36 MEMORY REPEAT
S37 RESET
S39 PROG
S44 OK
S22
S22'

## MECHANISM CONNECTION CIRCUIT



CN831
T.S LED
GND
MC-4
CN801
LED
T.S
GND
FL STOP
E.P
MC-1
R8001
R8002
T REEL SENSOR
CN811
T TOP SENSOR
GND
T END SENSOR
GND
FL START SW
GND
FL START
CN802
GND
E.P SW
FL STOP SW
SWD 5V
T REEL P
CN816
GND
E.P SW
FL STOP SW
SWD 5V
T REEL P
CN812
GND
FL START SW
T END SENSOR
T TOP SENSOR
E.P SW
FL STOP SW
SWD 5V
T REEL P
MC F/R
MC SERVO
MC FG2
GND
MC FG1
SWD 5V
MH PG
GND
MH FG
MH SERVO
DEW SENSOR
SW D2
SW D1
SW D3
ML -
ML +
TO CP-A CN301
CN822
ALWAYS 13V
GND (MH)
GND (MC)
CN823
ALWAYS 13V
GND (MH)
GND (MC)
GND
SW D2
SW D1
SW D3
ML +
ML -
DEW SENSOR
CN813
ALWAYS 13V
GND (MH)
GND (MC)
GND
SW D2
SW D1
SW D3
ML +
ML -
DEW SENSOR
CN821
DEW SENSOR
GND
DEW SENSOR
MODE DETECT SWITCH
G
2
1
3
ML
LOADING MOTOR
MC-3
MC-2
1AC0B11A00100
CN815
MC F/R
MC SERVO
MC FG2
GND
MC FG1
SWD 5V
ALWAYS 13V
GND (MC)
CAPSTAN MOTOR
MC
CN814
MH PG
GND
MH FG
ALWAYS 13V
MH SERVO
GND (MH)
HEAD MOTOR
MH

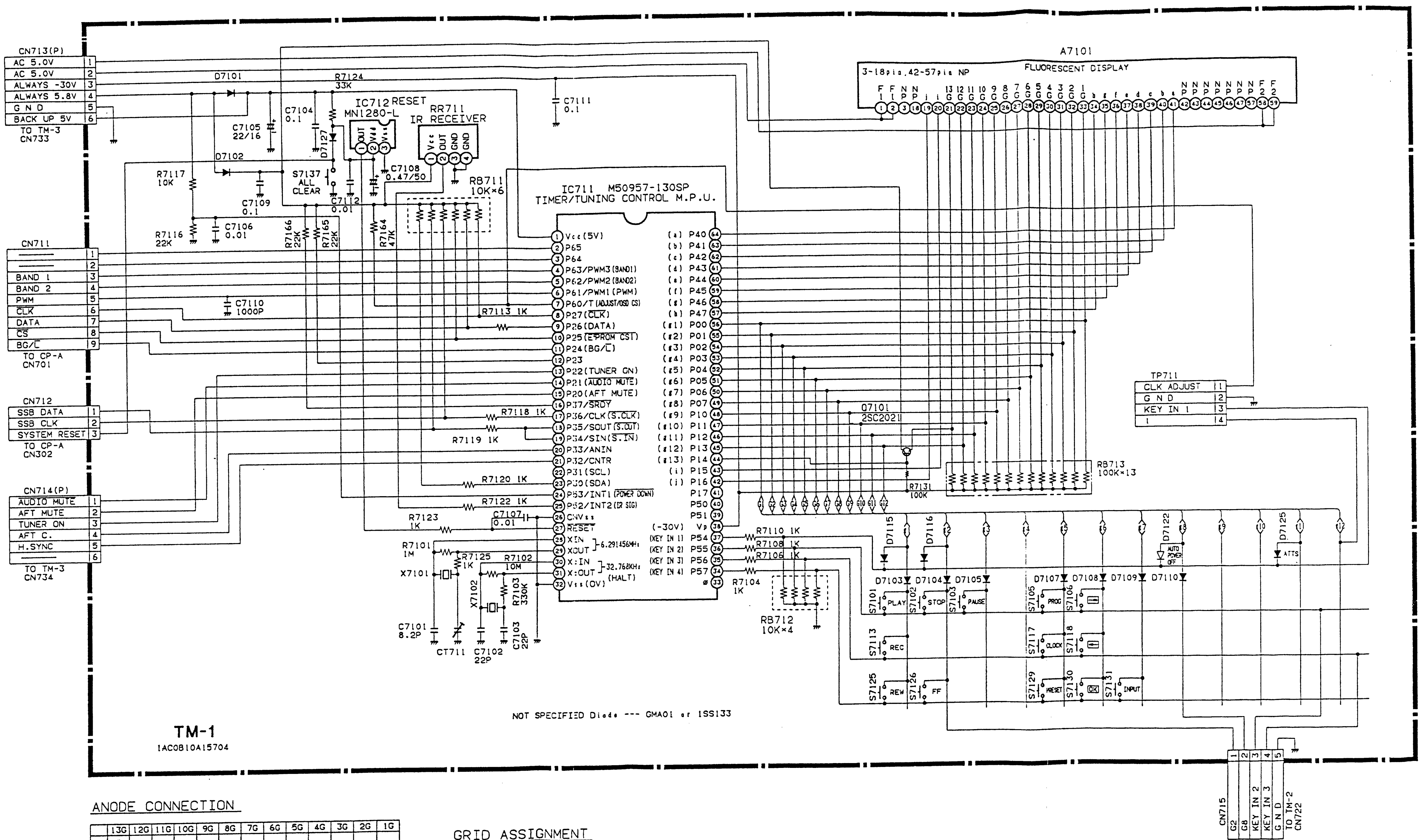
## RF CONVERTER CIRCUIT



ANT IN
BOOSTER+B (ALWAYS 5V)
MODULATOR (SWD 5V)
VD IN
AD IN
TUNER OUT
ANT OUT
R3 330
C5 0.001
C7 4P
R2 1.3K
C1 62P
C2 0.001
L1 0.33μ
L2 0.47μ
D1 GMA01
C3 0P (0-3P)
R1 510
Q1 2SC3355
C4 0P (0-5P)
R4 15
C6 15P
L3 1μ
C8 0.001
C9 0P (0-5P)
R7 47
T1
R6 75
R8 560
R5 240
C11 0.001
C10 0P (0-10P)
R9 620
L4
R10 300
R11 1.2K
C12 0.001
Q2 2SC3355
R12 13
C13 5P
L5 1μH
C14 4P
C15 0.001
L6
R13 180
C16 2P
R14 47
T2
R15 12
L7 0.56μ
R16 82
C23 5P
L8
C17 0.001
C18 0P (0P-0.1μ)
C19 0P (0P-0.1μ)
C20 0.1μ
C21 0.01μ
C22 10P
L51 3.3μH
C51 0.001
C52 0.1μ
C53 0.001
C54 0.001
C55 0.001
C69 5P
C68 1P
R65 150
R66 ∞
C70 0P (0-10P)
IC51 LA7054
R58 1.5K
R51 10
C56 10P
C57 1/50
R52 1.3K
R53 470K
X CSB503E54
T.S.G. SW51 ON OFF
C62 0P (0-100P)
C61 51P
L52
L53 56μH
R59 3K
C64 15P
C63 7P
D51 1SS242
D52 1SS242
T51
C72 6P
C71 12P
R54 68K
C59 0.1μ
C58 100P
C60 820P
R56 10K
R55 9.1K
Q51 2SC2712
TC
C65 27P
C66 68P
C67 0.1μ
R57 2.2K
R60 470K
R61 470K
R62 15K
R63 4.7K
R64 470K
SW52 B/G D/K
Q52 RN1410
VR
C105 12P
C106 300P
L101
L102
VC
C101 2.7P
C102 100P
R101 2.7K
L103 0.47μH
C103 1P
Q101 2SC3932S
C104 3P
R102 2.4K
R103 150
RF CONVERTER
1AC4F2AD00030

# COMPL. TM-1, 2 DISPLAY, TIMER, TUNING CONTROL & SWITCH CIRCUIT

Ⓕ FVH-P200DK

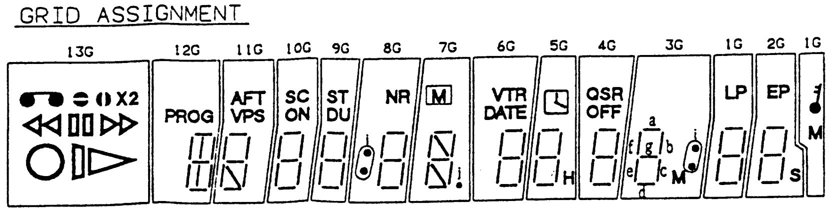


A7101
FLUORESCENT DISPLAY
3-18pin, 42-57pin NP
CN713(P)
AC 5.0V
AC 5.0V
ALWAYS -30V
ALWAYS 5.8V
G N D
BACK UP 5V
TO TM-3 CN733
D7101
D7102
C7105 22/16
C7104 0.1
R7124 33K
IC712 RESET MN1280-L
RR711 IR RECEIVER
C7111 0.1
R7117 10K
S7137 ALL CLEAR
C7108 0.47/50
C7109 0.1
C7112 0.01
R8711 10K×6
R7116 22K
C7106 0.01
R7166 22K
R7165 22K
R7164 47K
IC711 M50957-130SP
TIMER/TUNING CONTROL M.P.U.
CN711
BAND 1
BAND 2
PWM
CLK
DATA
CS
BG/L
TO CP-A CN701
C7110 1000P
R7113 1K
CN712
SSB DATA
SSB CLK
SYSTEM RESET
TO CP-A CN302
R7118 1K
R7119 1K
R7120 1K
R7122 1K
CN714(P)
AUDIO MUTE
AFT MUTE
TUNER ON
AFT C.
H.SYNC
TO TM-3 CN734
R7123 1K
C7107 0.01
R7101 1M
R7125 1K
R7102 10M
X7101
X7102
R7103 330K
C7101 8.2P
CT711
C7102 22P
C7103 22P
Vcc(5V) P65 P64 P63/PWM3(BAND1) P62/PWM2(BAND2) P61/PWM1(PWM) P60/T(ADJUST/OSD CS) P27(CLK) P26(DATA) P25(E²PROM CS) P24(BG/L) P23 P22(TUNER ON) P21(AUDIO MUTE) P20(AFT MUTE) P37/SRDY P36/CLK(S.CLK) P35/SOUT(S.OUT) P34/SIN(S.IN) P33/ANIN P32/CNTR P31(SCL) P30(SDA) P53/INT1(POWER DOWN) P52/INT2(12 SIG) CNVss RESET XIN XOUT X:IN X:OUT Vss(0V)
6.291456MHz
32.768KHz (HALT)
P40 P41 P42 P43 P44 P45 P46 P47 P00 P01 P02 P03 P04 P05 P06 P07 P10 P11 P12 P13 P14 P15 P16 P17 P50 P51 Vp P54 P55 P56 P57 ø
(-30V)
(KEY IN 1) (KEY IN 2) (KEY IN 3) (KEY IN 4)
Q7101 2SC2021
R7131 100K
RB713 100K×13
TP711
CLK ADJUST
G N D
KEY IN 1
R7110 1K
R7108 1K
R7106 1K
R7104 1K
RB712 10K×4
D7115 D7116 D7122 D7125
AUTO POWER OFF
ATTS
D7103 D7104 D7105 D7107 D7108 D7109 D7110
S7101 PLAY
S7102 STOP
S7103 PAUSE
S7105 PROG
S7106
S7113 REC
S7117 CLOCK
S7118
S7125 REW
S7126 FF
S7129 RESET
S7130
S7131 INPUT
NOT SPECIFIED Diode --- GMA01 or 1SS133
TM-1
1AC0B10A15704
CN715
G2
G8
KEY IN 2
KEY IN 3
G N D
TO TM-2 CN722

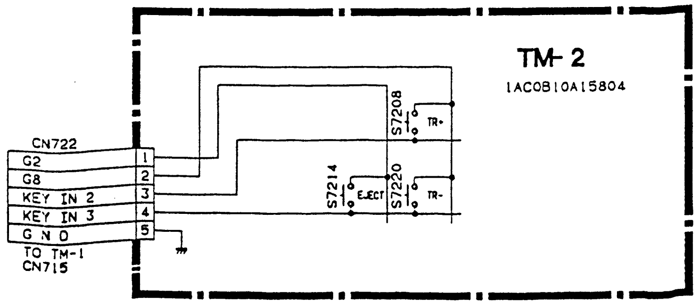
## ANODE CONNECTION

| | 13G | 12G | 11G | 10G | 9G | 8G | 7G | 6G | 5G | 4G | 3G | 2G | 1G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | ◍ | a | a | a | a | a | a | a | a | a | a | a | a |
| b | ×2 | b | b | b | b | b | b | b | b | b | b | b | b |
| c | ▯▯ | c | c | c | c | c | c | c | c | c | c | c | c |
| d | ○ | d | d | d | d | d | d | d | d | d | d | d | d |
| e | ▷ | e | e | e | e | e | e | e | e | e | e | e | e |
| f | ◁◁ | f | f | f | f | f | f | f | f | f | f | f | f |
| g | ▷▷ | g | g | g | g | g | g | g | g | g | g | g | g |
| h | ☎ | – | AFT | SC | ST | NR | M | VTR | 🕒 | QSR | – | LP | EP |
| i | ⊖ | PROG | VPS | ON | DU | ⁚ | \ | DATE | – | OFF | ⁚ | • | – |
| j | ▯ | ¦ | \ | – | – | – | • | – | H | – | M | M | S |

## GRID ASSIGNMENT

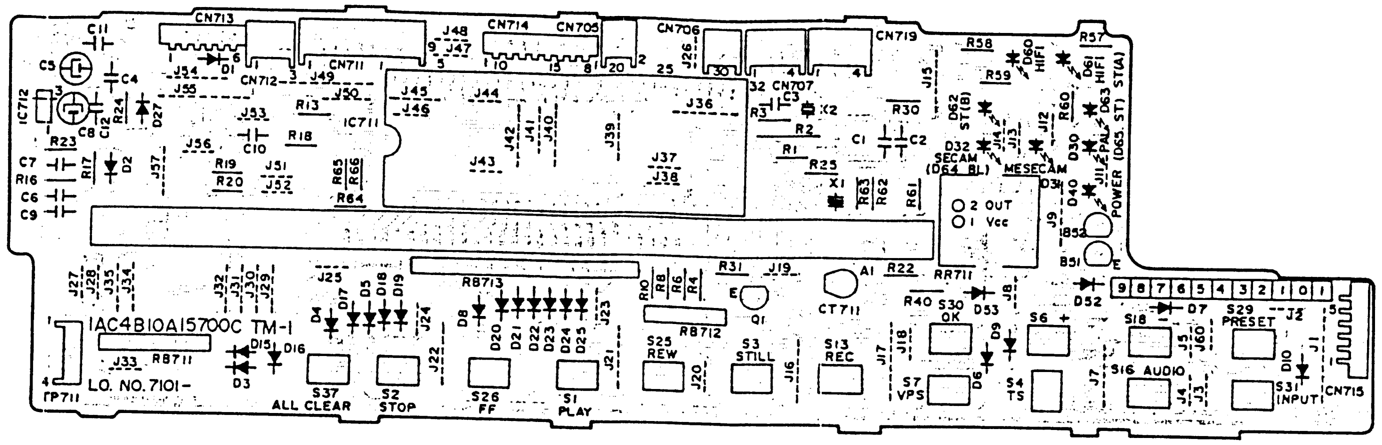


13G
12G
11G
10G
9G
8G
7G
6G
5G
4G
3G
1G
2G
1G
X2
PROG
AFT VPS
SC ON
ST DU
NR
M
VTR DATE
QSR OFF
LP
EP
H
M
S
a
b
c
d
e
f
g

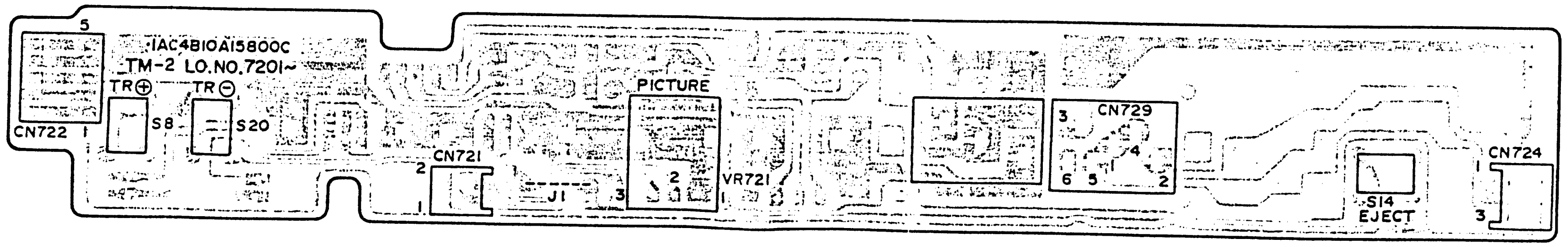


TM-2
1AC0B10A15804
CN722
G2
G8
KEY IN 2
KEY IN 3
G N D
TO TM-1 CN715
S7208 TR+
S7214 EJECT
S7220 TR-

## TM-1 DISPLAY, TIMER & TUNING CONTROL P.C.B.

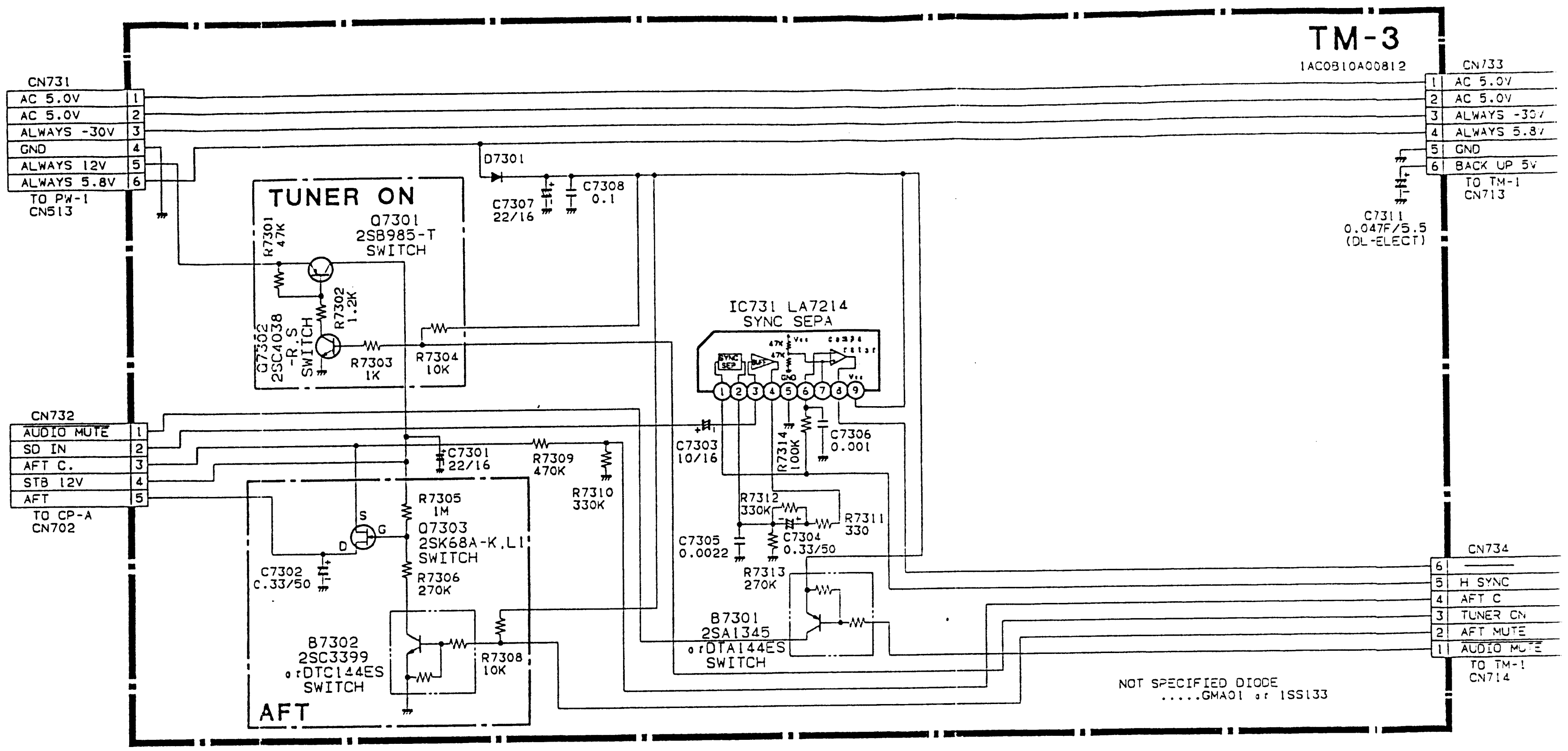

IAC4B10A15700C TM-1
LO. NO. 7101-
IC711
CN713
CN711
CN712
CN714
CN706
CN705
CN707
CN719
CN715
FP711
X1
X2
Q1
CT711
RR711
RB711
RB712
RB713
S37 ALL CLEAR
S2 STOP
S26 FF
S1 PLAY
S25 REW
S3 STILL
S13 REC
S7 VPS
S30 OK
S4 TS
S6 +
S18 -
S16 AUDIO
S29 PRESET
S31 INPUT
D62 ST(B)
D32 SECAM (D64 BL)
MESECAM
D60 HIFI
D61 HIFI
D63 ST(A)
D30 PAL
D40 POWER (D65 ST)
2 OUT
1 Vcc
9 8 7 6 5 4 3 2 1 0 1

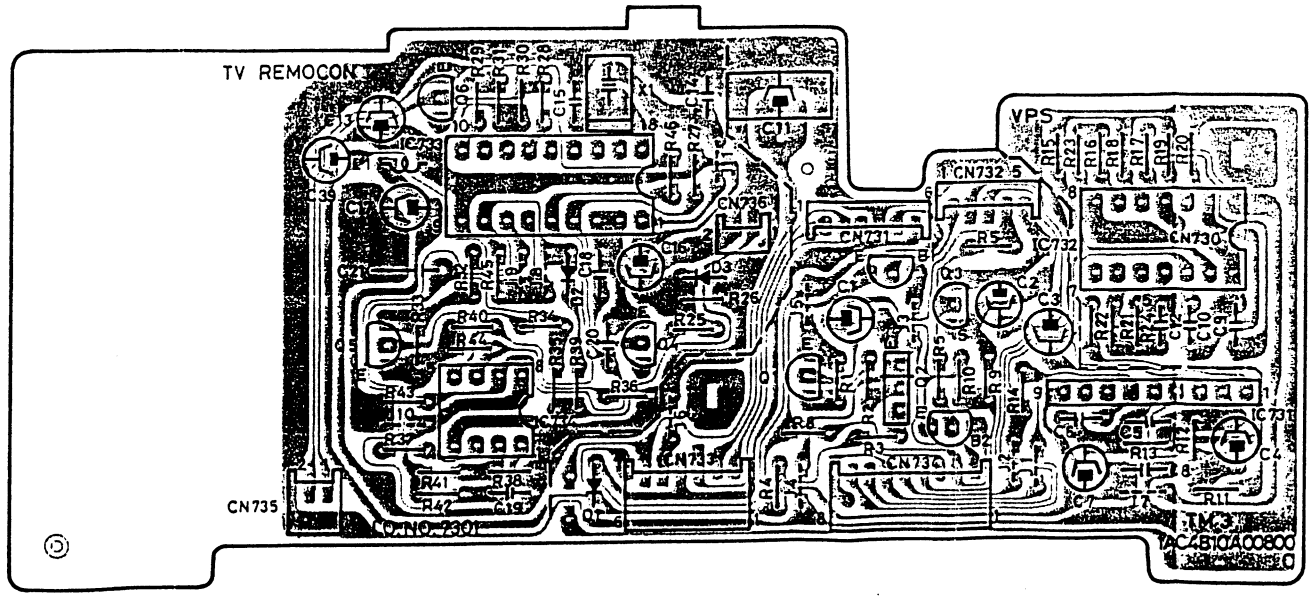
## TM-2 SWITCH P.C.B.


IAC4B10A15800C
TM-2 LO. NO. 7201~
CN722
TR⊕
TR⊖
S8
S20
CN721
J1
PICTURE
VR721
CN729
S14 EJECT
CN724

17 18 19 20 21 22 23 24 25 26 27 28 29 30

# COMPL. TM-3 SYNC SEPA CIRCUIT & P.C.B.

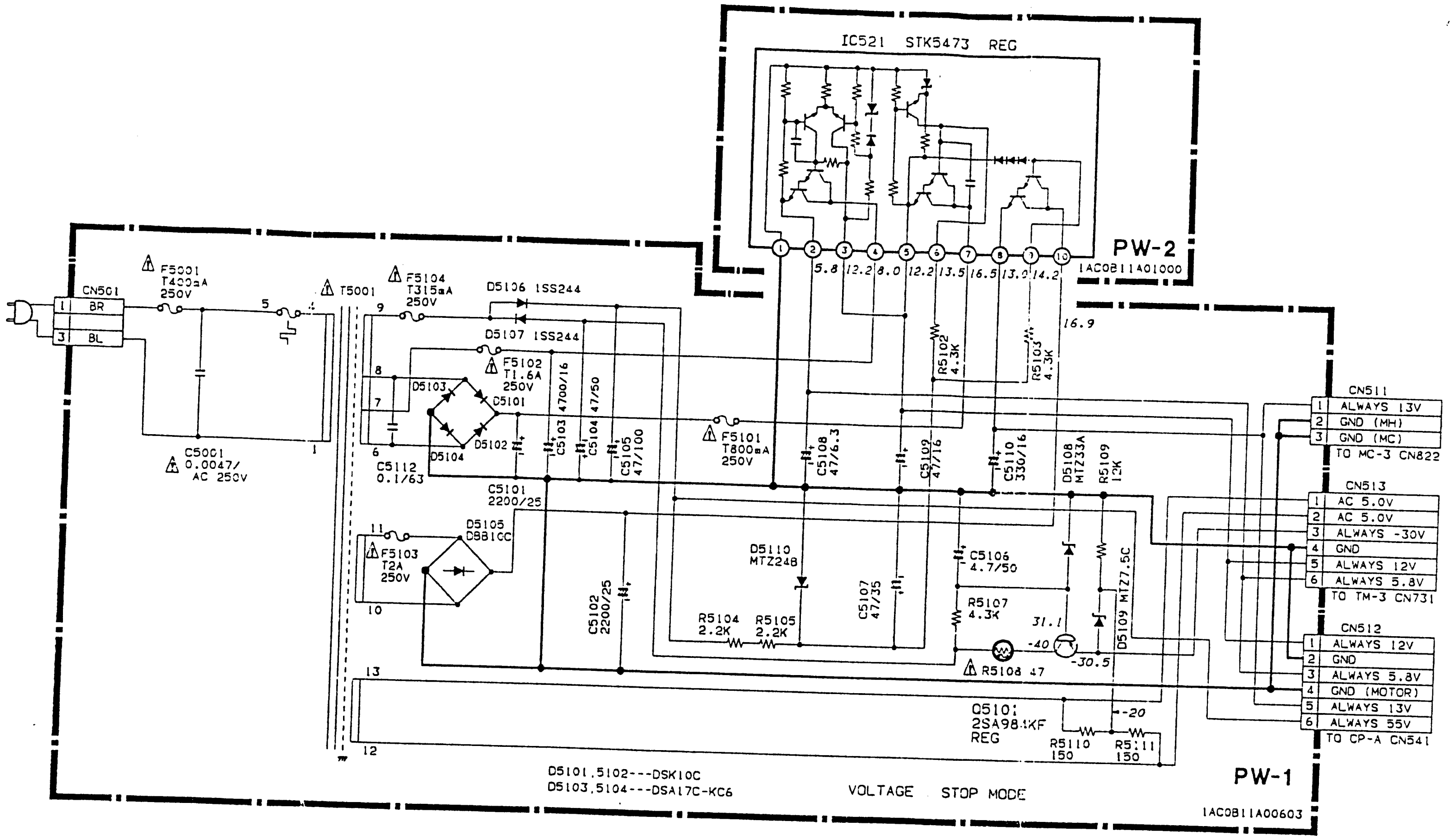

TM-3
1AC0B10A00812
CN731
AC 5.0V 1
AC 5.0V 2
ALWAYS -30V 3
GND 4
ALWAYS 12V 5
ALWAYS 5.8V 6
TO PW-1
CN513
TUNER ON
Q7301
2SB985-T
SWITCH
R7301
47K
R7302
1.2K
Q7302
2SC4038
-R.S
SWITCH
R7303
1K
R7304
10K
D7301
C7307
22/16
C7308
0.1
IC731 LA7214
SYNC SEPA
SYNC SEP
BUF
47K
Vcc
GND
CN732
AUDIO MUTE 1
SD IN 2
AFT C. 3
STB 12V 4
AFT 5
TO CP-A
CN702
C7301
22/16
R7309
470K
R7310
330K
C7303
10/16
R7314
100K
C7306
0.001
R7312
330K
R7311
330
C7305
0.0022
C7304
0.33/50
R7313
270K
R7305
1M
Q7303
2SK68A-K,L1
SWITCH
S
G
D
C7302
0.33/50
R7306
270K
B7302
2SC3399
or DTC144ES
SWITCH
R7308
10K
AFT
B7301
2SA1345
or DTA144ES
SWITCH
CN733
1 AC 5.0V
2 AC 5.0V
3 ALWAYS -30V
4 ALWAYS 5.8V
5 GND
6 BACK UP 5V
TO TM-1
CN713
C7311
0.047F/5.5
(DL-ELECT)
CN734
6
5 H SYNC
4 AFT C
3 TUNER ON
2 AFT MUTE
1 AUDIO MUTE
TO TM-1
CN714
NOT SPECIFIED DIODE
.....GMA01 or 1SS133


TV REMOCON
VPS
IC733
IC732
IC731
CN731
CN732
CN733
CN730
CN735
CN736
TM-3
1AC4B10A00800

K
J
I
H
G
F
E
D
C
B
A

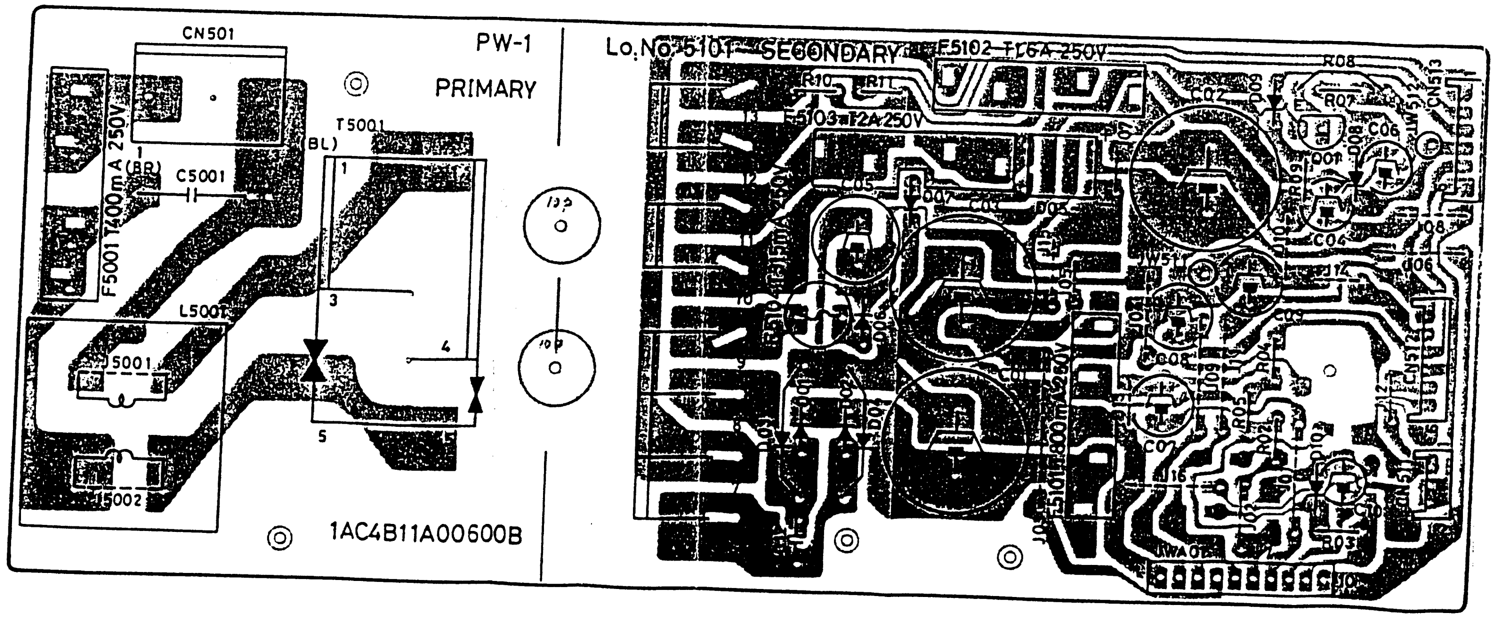
1 2 3 4 5 6 7 8 9 10

## COMPL. PW-1,2 POWER SUPPLY CIRCUIT

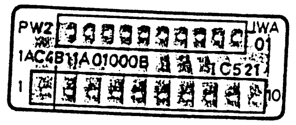

IC521 STK5473 REG
PW-2
1AC0B11A01000
5.8
12.2
8.0
12.2
13.5
16.5
13.0
14.2
16.9
CN501
BR
BL
F5001
T400mA
250V
T5001
F5104
T315mA
250V
D5106 1SS244
D5107 1SS244
F5102
T1.6A
250V
D5103
D5101
D5102
D5104
C5103 4700/16
C5104 47/50
C5105 47/100
C5112
0.1/63
C5001
0.0047/
AC 250V
C5101
2200/25
D5105
D8B1CC
F5103
T2A
250V
C5102
2200/25
F5101
T800mA
250V
C5108
47/6.3
C5109
47/16
C5110
330/16
R5102
4.3K
R5103
4.3K
D5108
MTZ33A
R5109
12K
D5110
MTZ24B
C5107
47/35
C5106
4.7/50
R5107
4.3K
R5104
2.2K
R5105
2.2K
R5108 47
31.1
-40
-30.5
D5109 MTZ7.5C
Q5101
2SA984KF
REG
-20
R5110
150
R5111
150
CN511
1 ALWAYS 13V
2 GND (MH)
3 GND (MC)
TO MC-3 CN822
CN513
1 AC 5.0V
2 AC 5.0V
3 ALWAYS -30V
4 GND
5 ALWAYS 12V
6 ALWAYS 5.8V
TO TM-3 CN731
CN512
1 ALWAYS 12V
2 GND
3 ALWAYS 5.8V
4 GND (MOTOR)
5 ALWAYS 13V
6 ALWAYS 55V
TO CP-A CN541
D5101,5102---DSK10C
D5103,5104---DSA17C-KC6
VOLTAGE STOP MODE
PW-1
1AC0B11A00603

Ⓖ
FVH-P200DK

## PW-1 POWER SUPPLY P.C.B.


CN501
PW-1
PRIMARY
Lo.No.5101 SECONDARY
F5102 T1.6A 250V
T5001
(BL)
(BR)
C5001
F5001 T400mA 250V
L5001
5001
5002
F5103 T2A 250V
F5101 T800mA 250V
1AC4B11A00600B

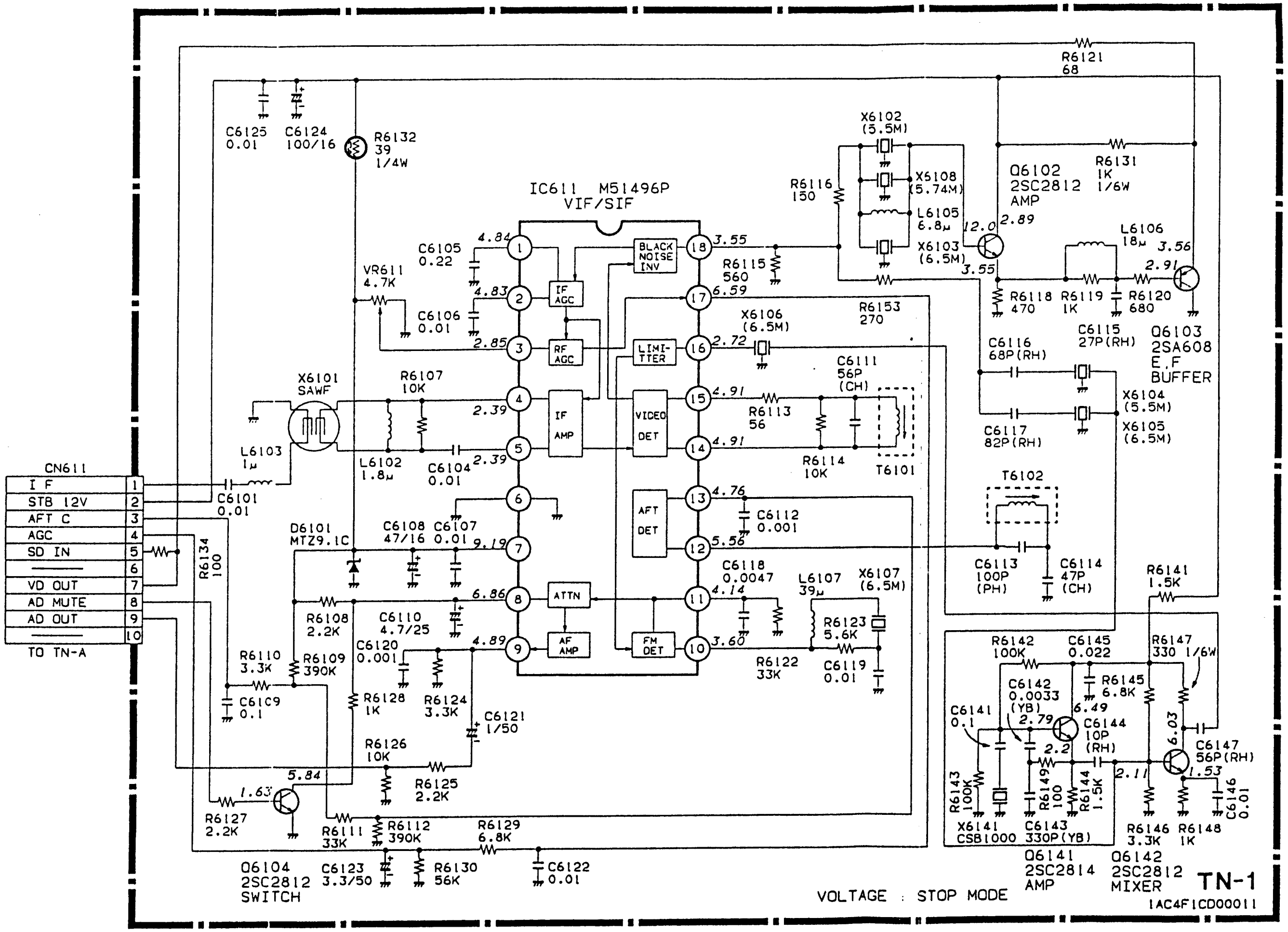
## PW-2 POWER SUPPLY P.C.B.


PW2
JWA
01
1AC4B11A01000B
IC521
1
10

11 12 13 14 15 16 17 18 19 20 21 22

COMPL. TN-1 IF CIRCUIT

**FVH-P200DK**

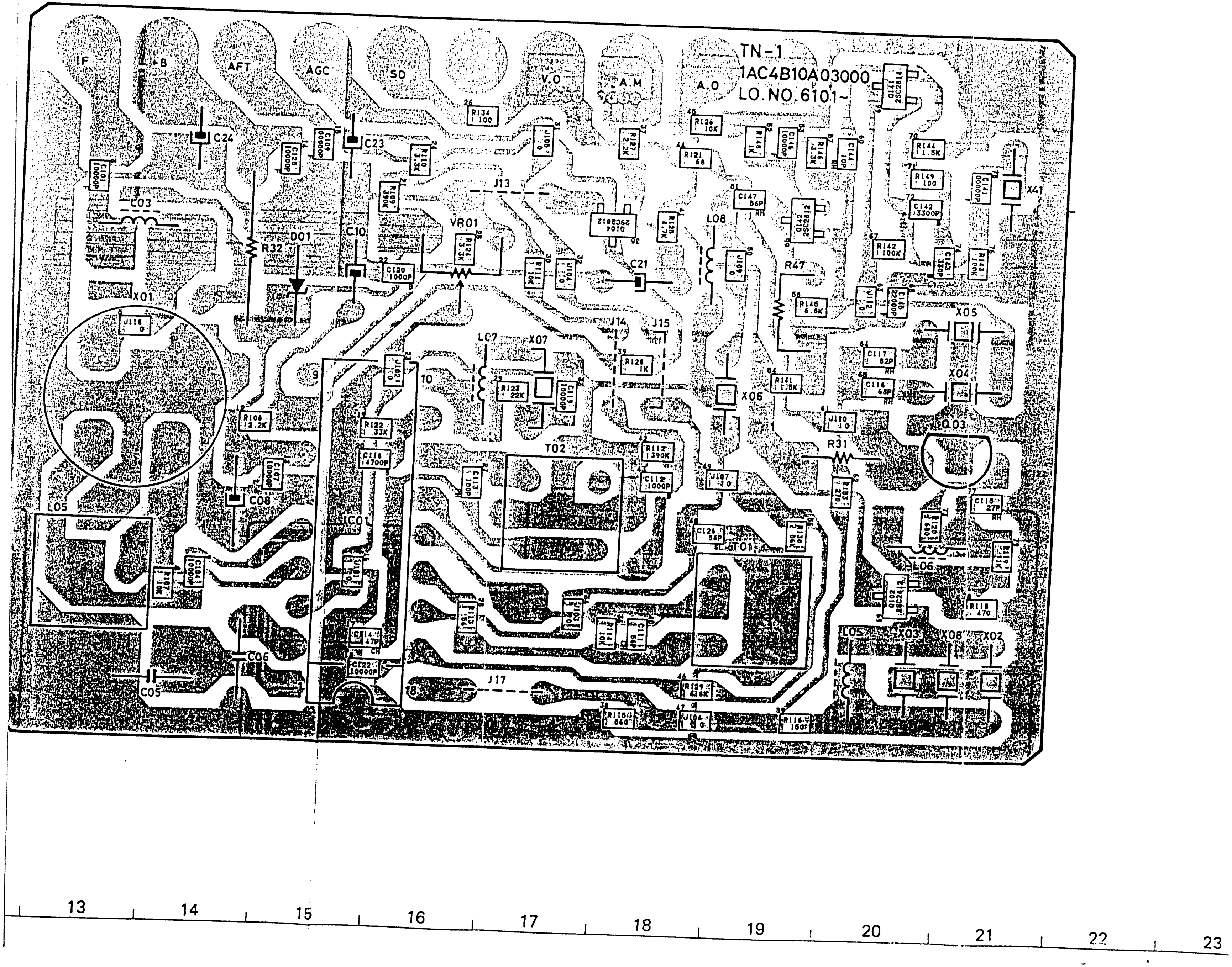


CN611
I F
STB 12V
AFT C
AGC
SD IN
VD OUT
AD MUTE
AD OUT
TO TN-A
1
2
3
4
5
6
7
8
9
10
C6125
0.01
C6124
100/16
R6132
39
1/4W
IC611 M51496P
VIF/SIF
BLACK NOISE INV
IF AGC
RF AGC
IF AMP
LIMI-TTER
VIDEO DET
AFT DET
ATTN
AF AMP
FM DET
C6105
0.22
C6106
0.01
VR611
4.7K
X6101
SAWF
L6103
1μ
C6101
0.01
L6102
1.8μ
R6107
10K
C6104
0.01
D6101
MTZ9.1C
C6108
47/16
C6107
0.01
R6108
2.2K
C6110
4.7/25
C6120
0.001
R6110
3.3K
R6109
390K
C6109
0.1
R6128
1K
R6124
3.3K
C6121
1/50
R6126
10K
R6125
2.2K
R6134
100
R6127
2.2K
R6111
33K
R6112
390K
R6129
6.8K
Q6104
2SC2812
SWITCH
C6123
3.3/50
R6130
56K
C6122
0.01
4.84
4.83
2.85
2.39
2.39
9.19
6.86
4.89
5.84
1.63
3.55
6.59
2.72
4.91
4.91
4.76
5.56
4.14
3.60
R6115
560
X6106
(6.5M)
R6153
270
C6111
56P
(CH)
R6113
56
R6114
10K
T6101
C6112
0.001
C6118
0.0047
L6107
39μ
X6107
(6.5M)
R6123
5.6K
R6122
33K
C6119
0.01
R6116
150
X6102
(5.5M)
X6108
(5.74M)
L6105
6.8μ
X6103
(6.5M)
R6121
68
Q6102
2SC2812
AMP
R6131
1K
1/6W
12.0
2.89
3.55
L6106
18μ
3.56
2.91
R6118
470
R6119
1K
R6120
680
C6115
27P(RH)
Q6103
2SA608
E.F
BUFFER
C6116
68P(RH)
C6117
82P(RH)
X6104
(5.5M)
X6105
(6.5M)
T6102
C6113
100P
(PH)
C6114
47P
(CH)
R6141
1.5K
R6142
100K
C6145
0.022
R6147
330 1/6W
C6142
0.0033
(YB)
R6145
6.8K
6.49
2.79
2.2
C6141
0.1
C6144
10P
(RH)
6.03
C6147
56P(RH)
2.11
1.53
R6143
100K
R6149
100
R6144
1.5K
C6146
0.01
X6141
CSB1000
C6143
330P(YB)
R6146
3.3K
R6148
1K
Q6141
2SC2814
AMP
Q6142
2SC2812
MIXER
VOLTAGE : STOP MODE
TN-1
1AC4F1CD00011

J
I
H
G
F
E
D
C
B
A

1 2 3 4 5 6 7 8 9 10 11 12

P.C.B.


TN-1
1AC4B10A03000
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R125 4.7K
R143 1K
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